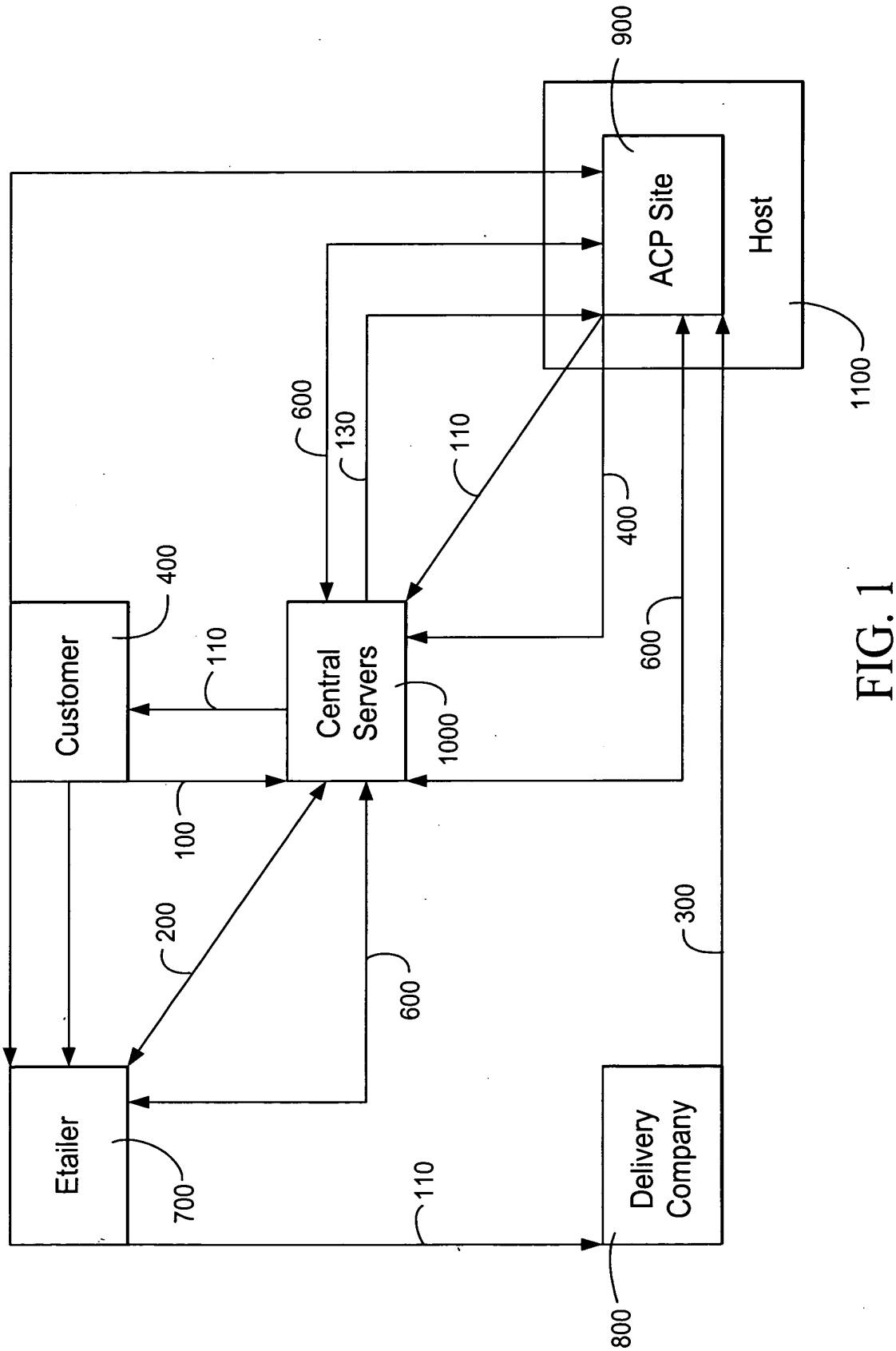

900
ACP Site
Host
1100
600
130
110
400
Customer
110
Central Servers
1000
600
100
200
600
300
Etailer
700
110
Delivery Company
800

FIG. 1

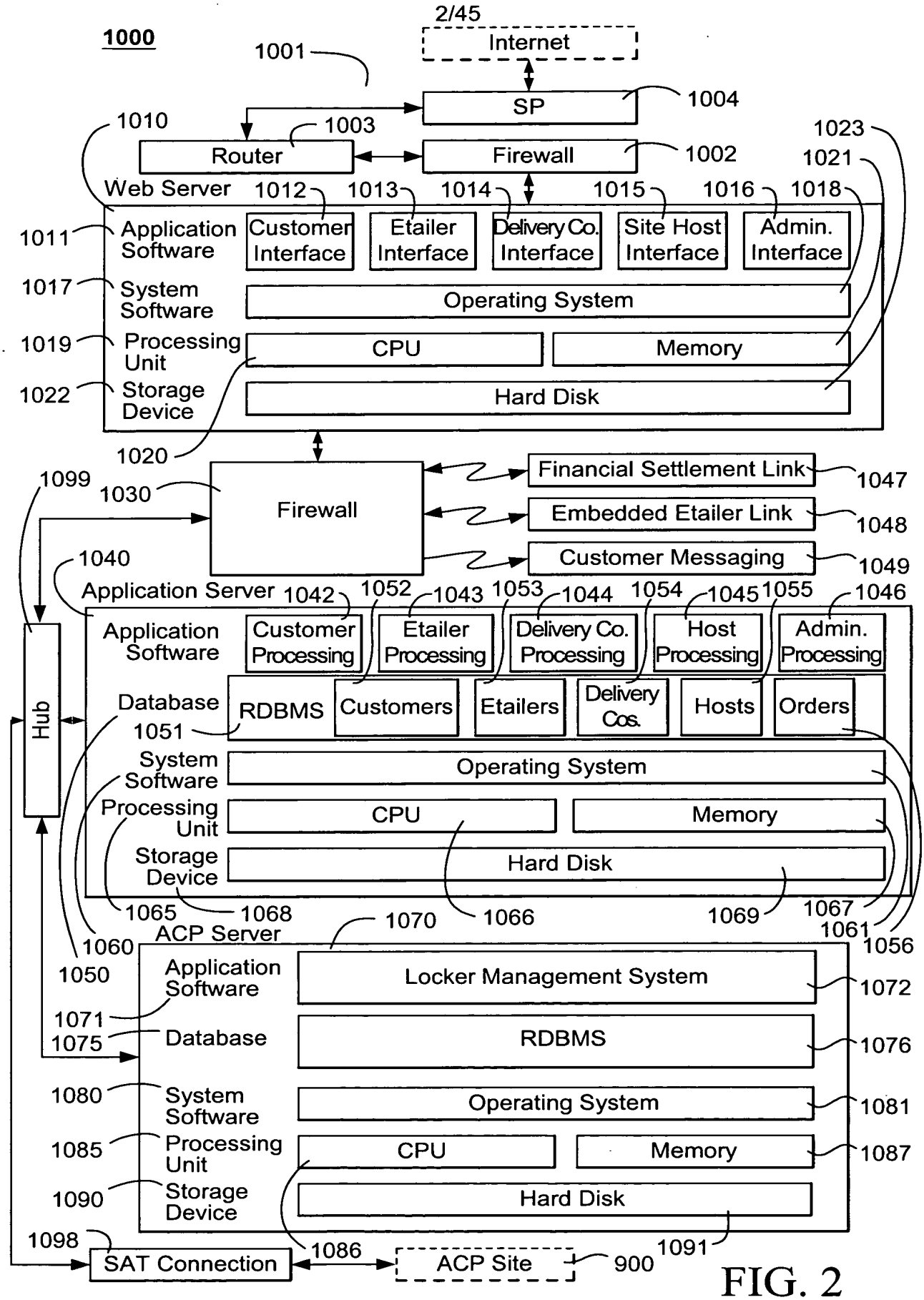

1000
Internet
1001
SP
1004
1010
1003
Router
Firewall
1002
1023
1021
Web Server
1012
1013
1014
1015
1016
1018
1011
Application Software
Customer Interface
Etailer Interface
Delivery Co. Interface
Site Host Interface
Admin. Interface
1017
System Software
Operating System
1019
Processing Unit
CPU
Memory
1022
Storage Device
Hard Disk
1020
1099
1030
Firewall
Financial Settlement Link
1047
Embedded Etailer Link
1048
Customer Messaging
1049
1040
Application Server
1042
1052
1043
1053
1044
1054
1045
1055
1046
Application Software
Customer Processing
Etailer Processing
Delivery Co. Processing
Host Processing
Admin. Processing
Hub
Database
RDBMS
Customers
Etailers
Delivery Cos.
Hosts
Orders
1051
System Software
Operating System
Processing Unit
CPU
Memory
Storage Device
Hard Disk
1065
1068
1070
1066
1069
1067
1061
1056
ACP Server
1060
1050
Application Software
Locker Management System
1072
1071
1075
Database
RDBMS
1076
1080
System Software
Operating System
1081
1085
Processing Unit
CPU
Memory
1087
1090
Storage Device
Hard Disk
1098
1086
1091
SAT Connection
ACP Site
900

FIG. 2

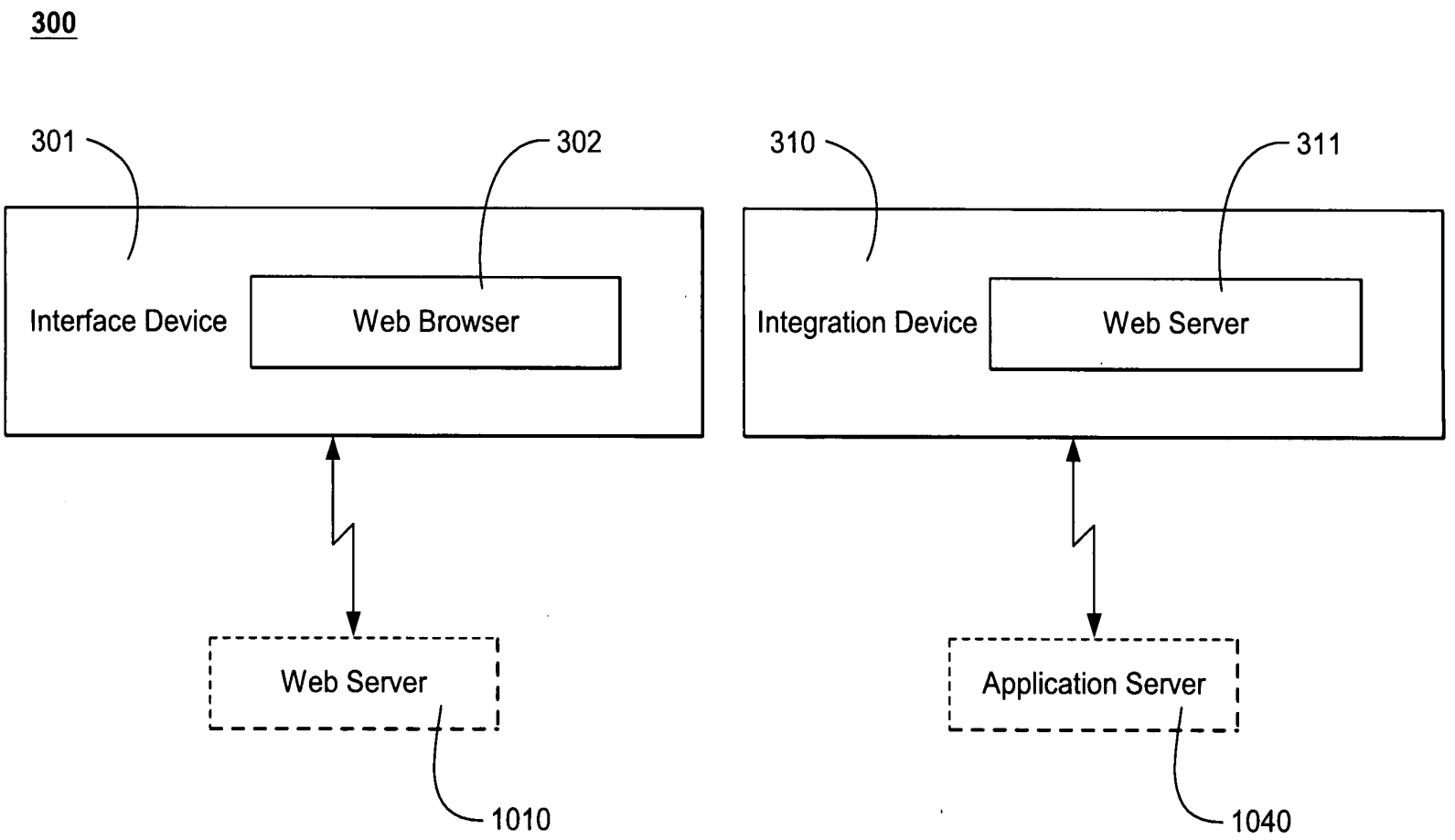

300
301
302
Interface Device
Web Browser
310
311
Integration Device
Web Server
Web Server
1010
Application Server
1040

FIG. 3

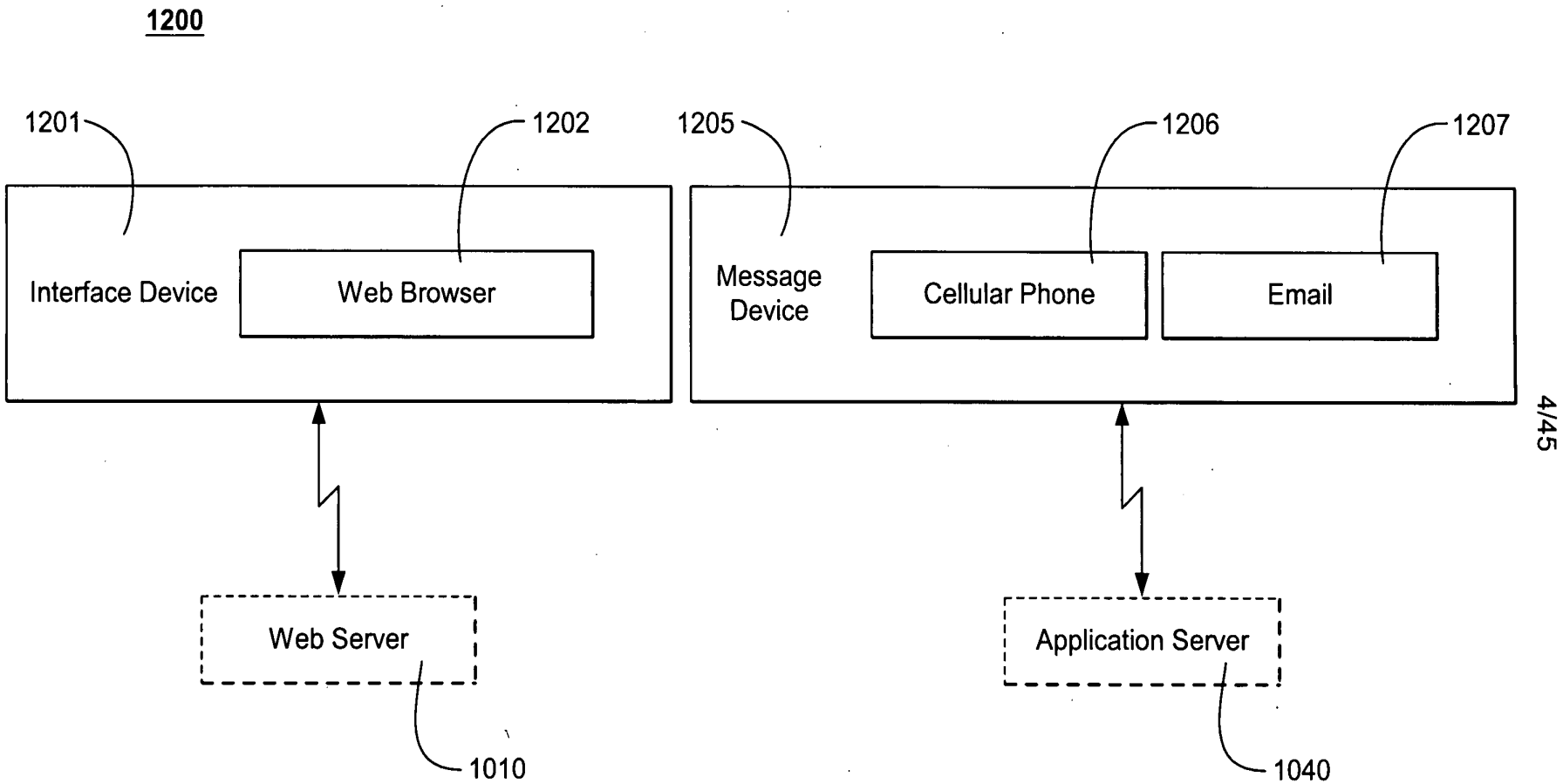

1200
1201
1202
1205
1206
1207
Interface Device
Web Browser
Message Device
Cellular Phone
Email
Web Server
Application Server
1010
1040

FIG. 4

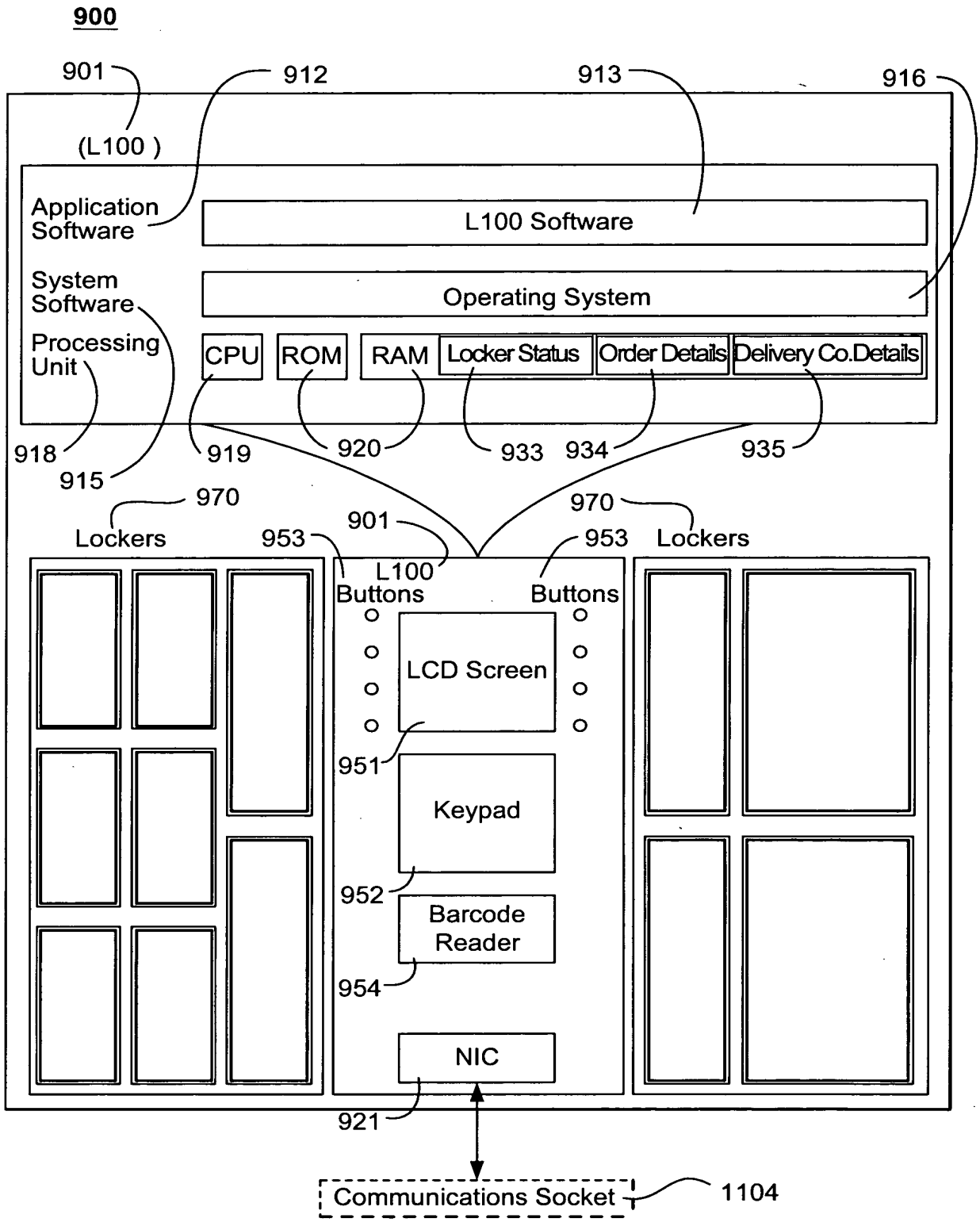

900
901
(L100)
912
913
916
Application Software
L100 Software
System Software
Operating System
Processing Unit
CPU
ROM
RAM
Locker Status
Order Details
Delivery Co.Details
918
915
919
920
933
934
935
970
Lockers
953
901
L100
Buttons
953
Buttons
970
Lockers
LCD Screen
951
Keypad
952
Barcode Reader
954
NIC
921
Communications Socket
1104

FIG. 5

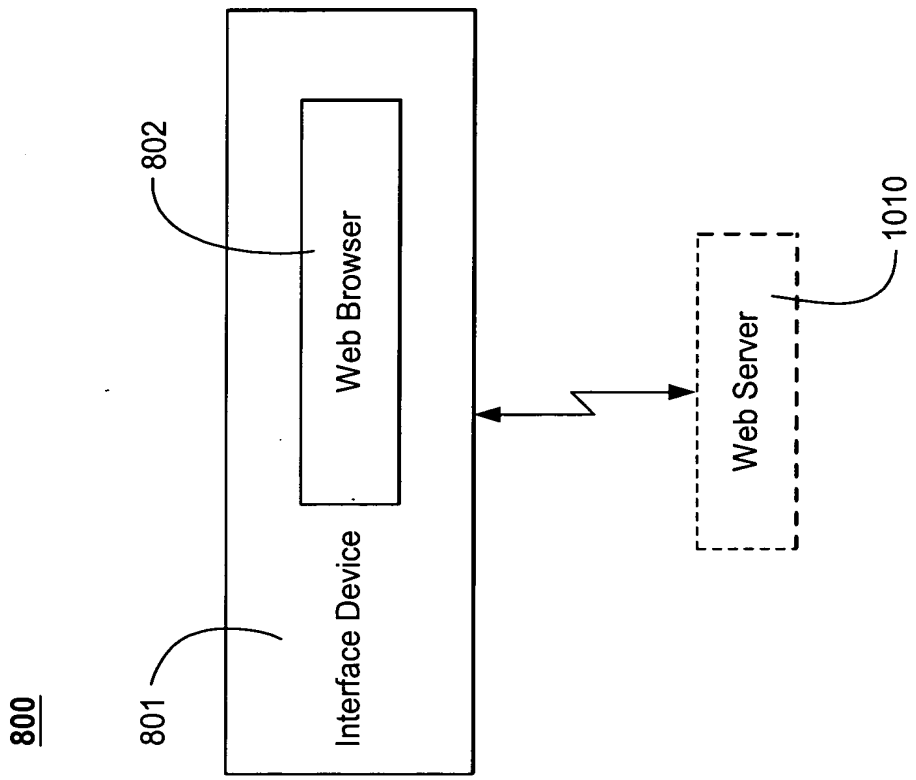


FIG. 6

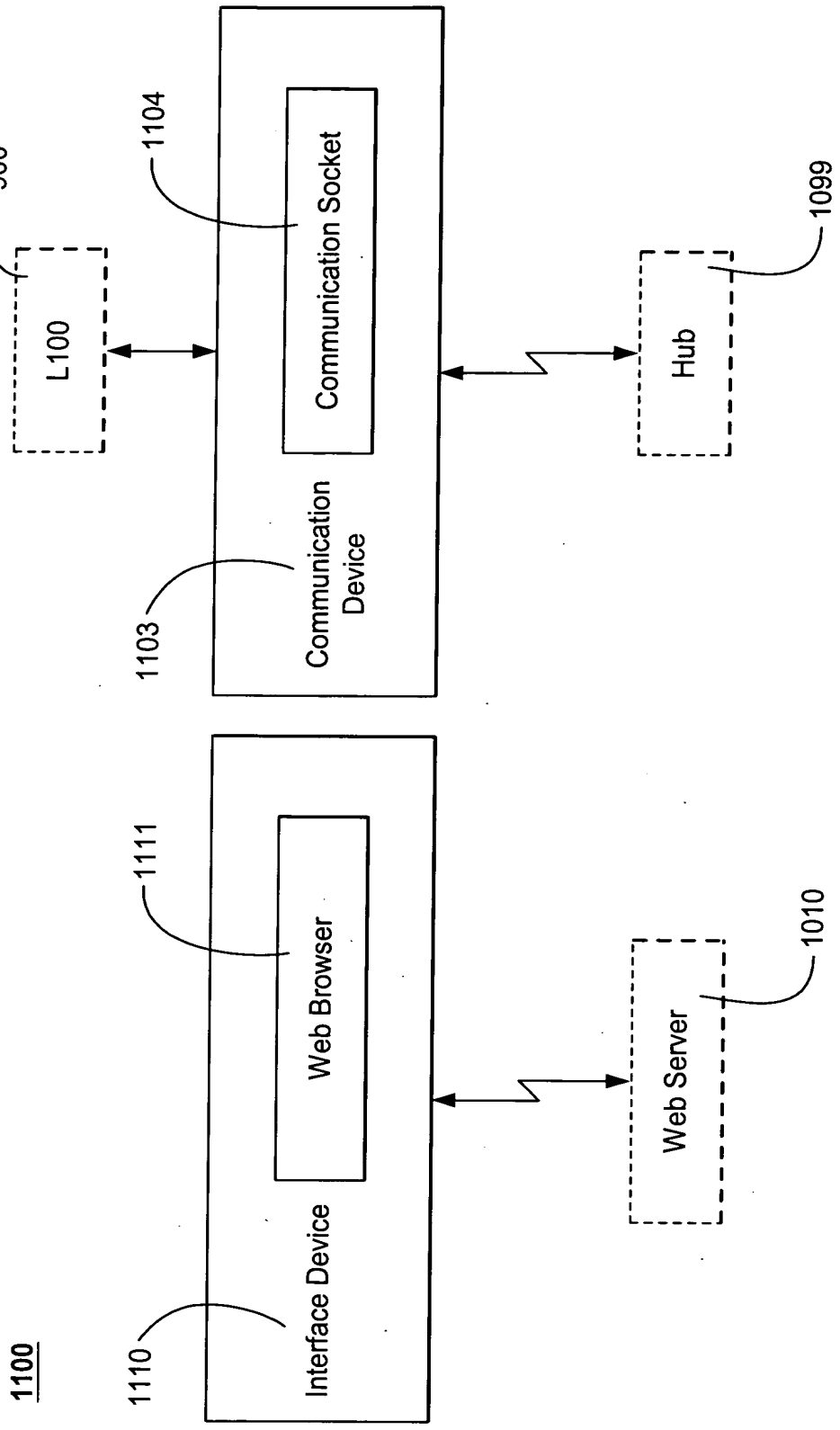

1100
1110
Interface Device
1111
Web Browser
1103
Communication Device
1104
Communication Socket
900
L100
1099
Hub
1010
Web Server

FIG. 7

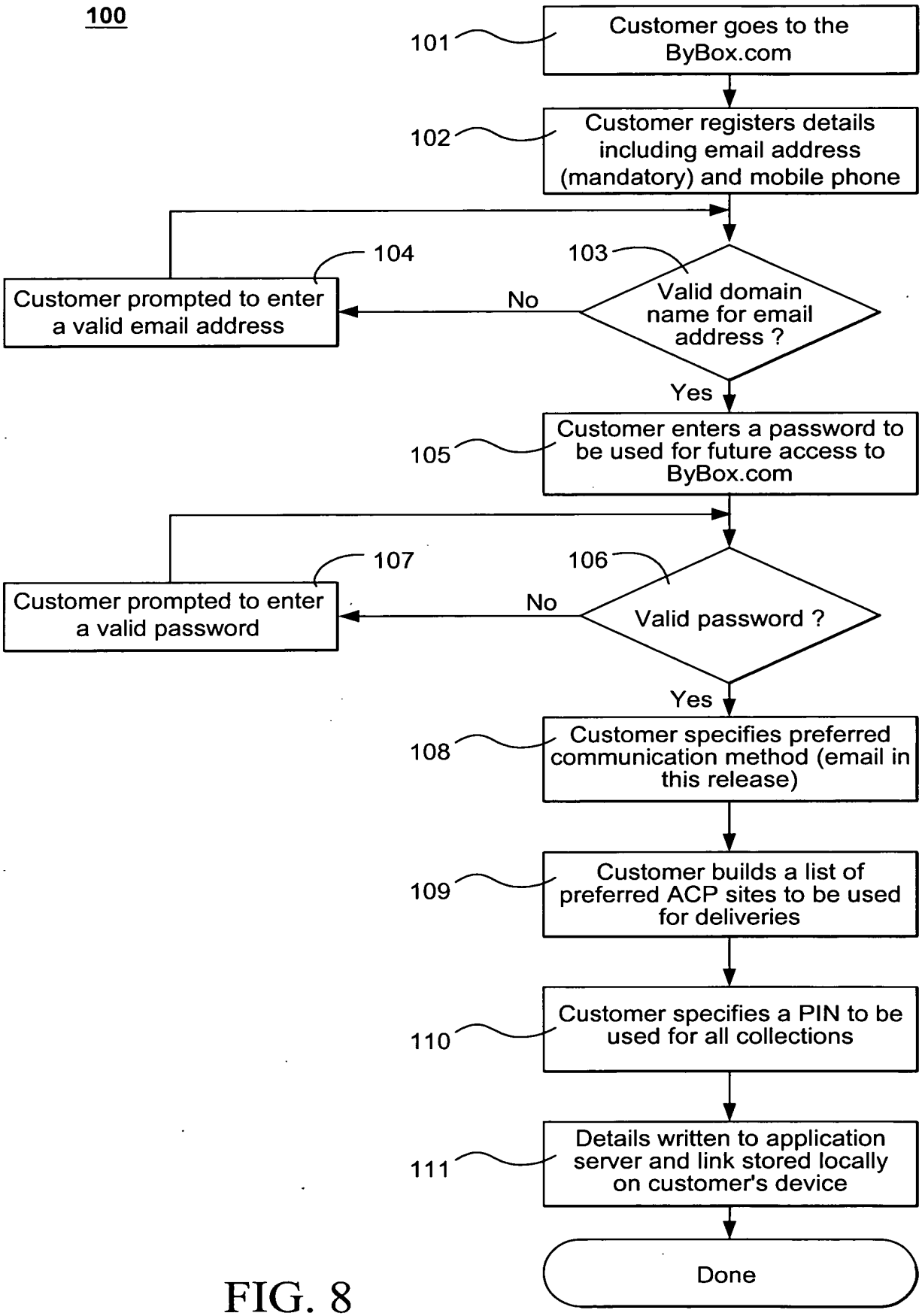

100
101
Customer goes to the ByBox.com
102
Customer registers details including email address (mandatory) and mobile phone
103
Valid domain name for email address ?
No
104
Customer prompted to enter a valid email address
Yes
105
Customer enters a password to be used for future access to ByBox.com
106
Valid password ?
No
107
Customer prompted to enter a valid password
Yes
108
Customer specifies preferred communication method (email in this release)
109
Customer builds a list of preferred ACP sites to be used for deliveries
110
Customer specifies a PIN to be used for all collections
111
Details written to application server and link stored locally on customer's device
Done

FIG. 8

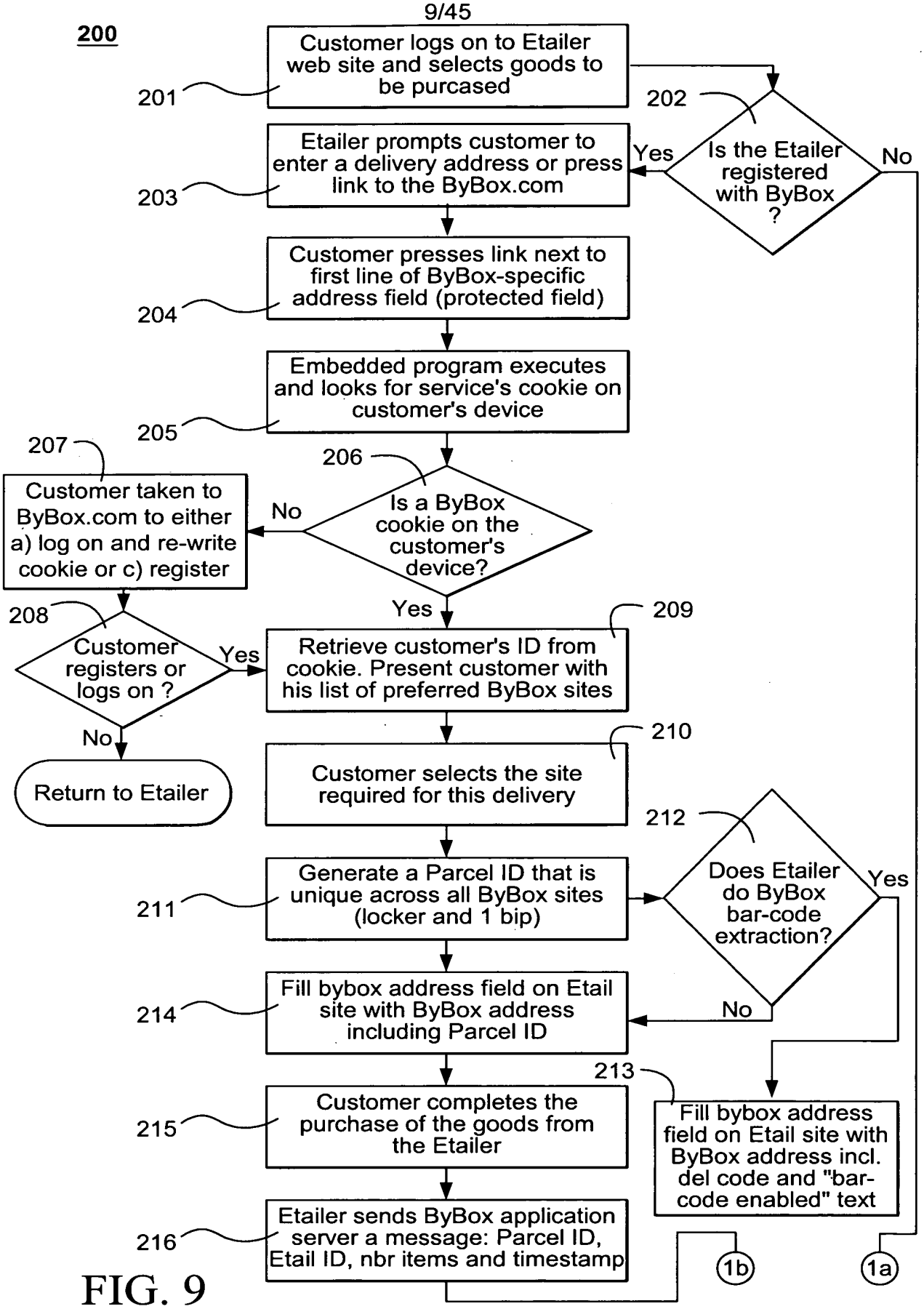

200
Customer logs on to Etailer web site and selects goods to be purcased
201
Is the Etailer registered with ByBox ?
202
Yes
No
Etailer prompts customer to enter a delivery address or press link to the ByBox.com
203
Customer presses link next to first line of ByBox-specific address field (protected field)
204
Embedded program executes and looks for service's cookie on customer's device
205
Is a ByBox cookie on the customer's device?
206
No
Yes
Customer taken to ByBox.com to either a) log on and re-write cookie or c) register
207
Customer registers or logs on ?
208
Yes
No
Return to Etailer
Retrieve customer's ID from cookie. Present customer with his list of preferred ByBox sites
209
Customer selects the site required for this delivery
210
Does Etailer do ByBox bar-code extraction?
212
Yes
No
Generate a Parcel ID that is unique across all ByBox sites (locker and 1 bip)
211
Fill bybox address field on Etail site with ByBox address including Parcel ID
214
Fill bybox address field on Etail site with ByBox address incl. del code and "bar-code enabled" text
213
Customer completes the purchase of the goods from the Etailer
215
Etailer sends ByBox application server a message: Parcel ID, Etail ID, nbr items and timestamp
216
1b
1a

FIG. 9

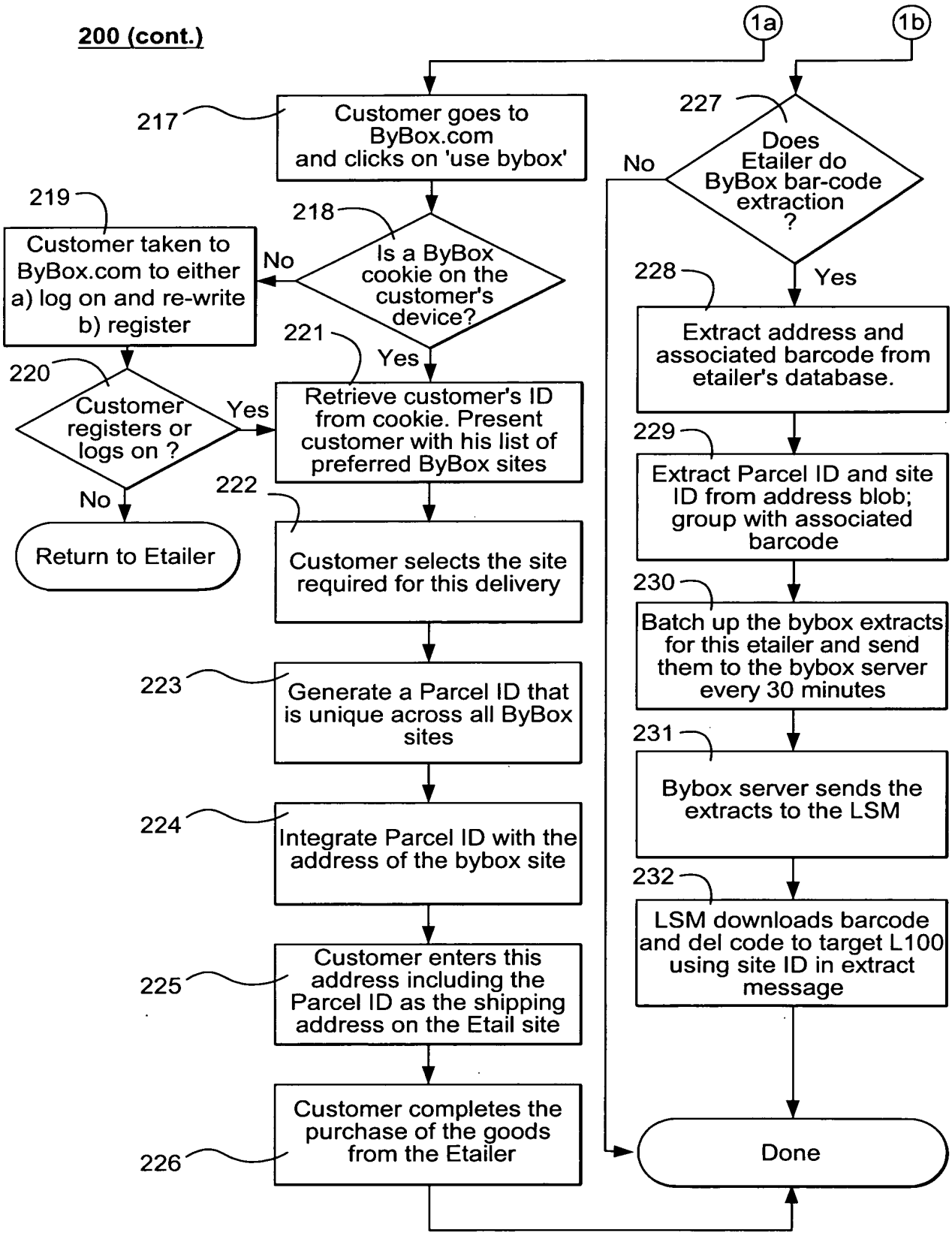

200 (cont.)
1a
1b
217
Customer goes to ByBox.com and clicks on 'use bybox'
218
Is a ByBox cookie on the customer's device?
No
219
Customer taken to ByBox.com to either a) log on and re-write b) register
Yes
221
Retrieve customer's ID from cookie. Present customer with his list of preferred ByBox sites
220
Customer registers or logs on ?
Yes
No
Return to Etailer
222
Customer selects the site required for this delivery
223
Generate a Parcel ID that is unique across all ByBox sites
224
Integrate Parcel ID with the address of the bybox site
225
Customer enters this address including the Parcel ID as the shipping address on the Etail site
226
Customer completes the purchase of the goods from the Etailer
227
Does Etailer do ByBox bar-code extraction ?
No
Yes
228
Extract address and associated barcode from etailer's database.
229
Extract Parcel ID and site ID from address blob; group with associated barcode
230
Batch up the bybox extracts for this etailer and send them to the bybox server every 30 minutes
231
Bybox server sends the extracts to the LSM
232
LSM downloads barcode and del code to target L100 using site ID in extract message
Done

FIG. 9A

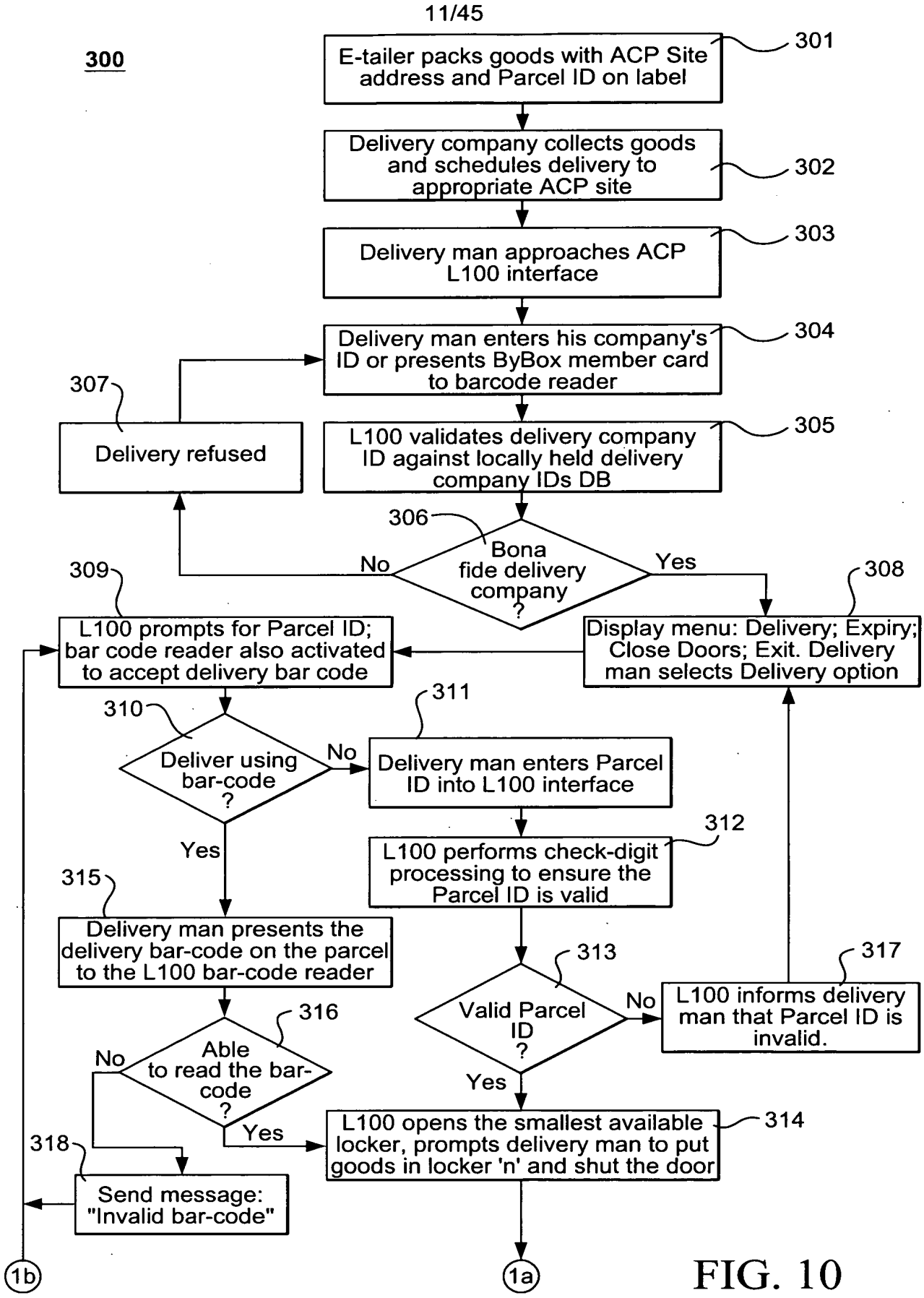
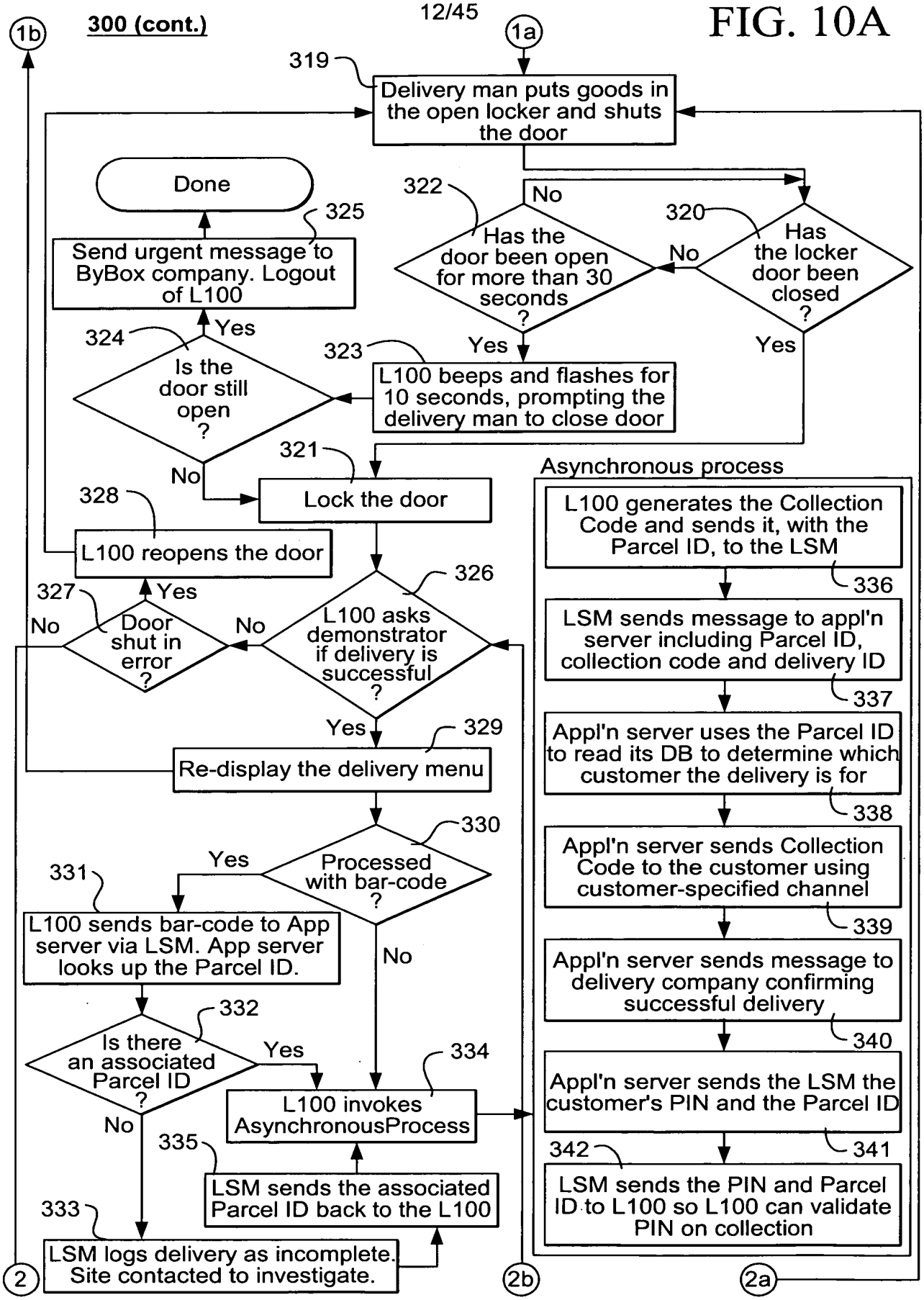

300
E-tailer packs goods with ACP Site address and Parcel ID on label
301
Delivery company collects goods and schedules delivery to appropriate ACP site
302
Delivery man approaches ACP L100 interface
303
Delivery man enters his company's ID or presents ByBox member card to barcode reader
304
L100 validates delivery company ID against locally held delivery company IDs DB
305
306
Bona fide delivery company ?
No
Yes
307
Delivery refused
308
Display menu: Delivery; Expiry; Close Doors; Exit. Delivery man selects Delivery option
309
L100 prompts for Parcel ID; bar code reader also activated to accept delivery bar code
310
Deliver using bar-code ?
No
311
Delivery man enters Parcel ID into L100 interface
312
L100 performs check-digit processing to ensure the Parcel ID is valid
313
Valid Parcel ID ?
No
317
L100 informs delivery man that Parcel ID is invalid.
Yes
314
L100 opens the smallest available locker, prompts delivery man to put goods in locker 'n' and shut the door
315
Delivery man presents the delivery bar-code on the parcel to the L100 bar-code reader
316
Able to read the bar-code ?
No
Yes
318
Send message: "Invalid bar-code"
1b
1a

FIG. 10

FIG. 10A


300 (cont.)
1b
1a
319
Delivery man puts goods in the open locker and shuts the door
322
Has the door been open for more than 30 seconds ?
No
320
Has the locker door been closed ?
No
Yes
Yes
Done
325
Send urgent message to ByBox company. Logout of L100
324
Is the door still open ?
Yes
323
L100 beeps and flashes for 10 seconds, prompting the delivery man to close door
No
321
Lock the door
328
L100 reopens the door
326
L100 asks demonstrator if delivery is successful ?
No
327
Door shut in error ?
Yes
No
Yes
329
Re-display the delivery menu
330
Processed with bar-code ?
Yes
No
331
L100 sends bar-code to App server via LSM. App server looks up the Parcel ID.
332
Is there an associated Parcel ID ?
Yes
No
334
L100 invokes AsynchronousProcess
335
LSM sends the associated Parcel ID back to the L100
333
LSM logs delivery as incomplete. Site contacted to investigate.
2
2b
2a
Asynchronous process
L100 generates the Collection Code and sends it, with the Parcel ID, to the LSM
336
LSM sends message to appl'n server including Parcel ID, collection code and delivery ID
337
Appl'n server uses the Parcel ID to read its DB to determine which customer the delivery is for
338
Appl'n server sends Collection Code to the customer using customer-specified channel
339
Appl'n server sends message to delivery company confirming successful delivery
340
Appl'n server sends the LSM the customer's PIN and the Parcel ID
341
342
LSM sends the PIN and Parcel ID to L100 so L100 can validate PIN on collection

300 cont.

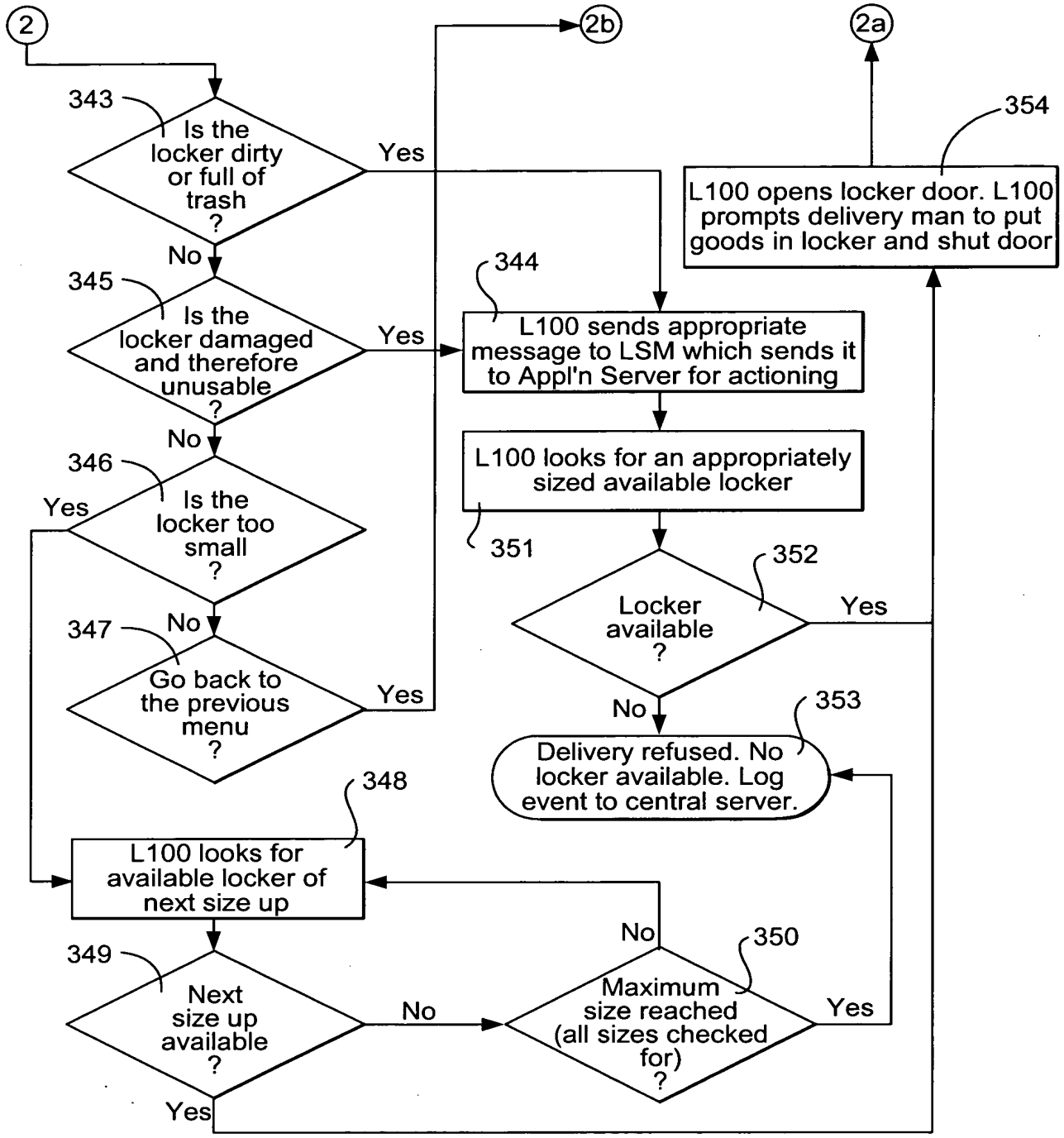


FIG. 10B

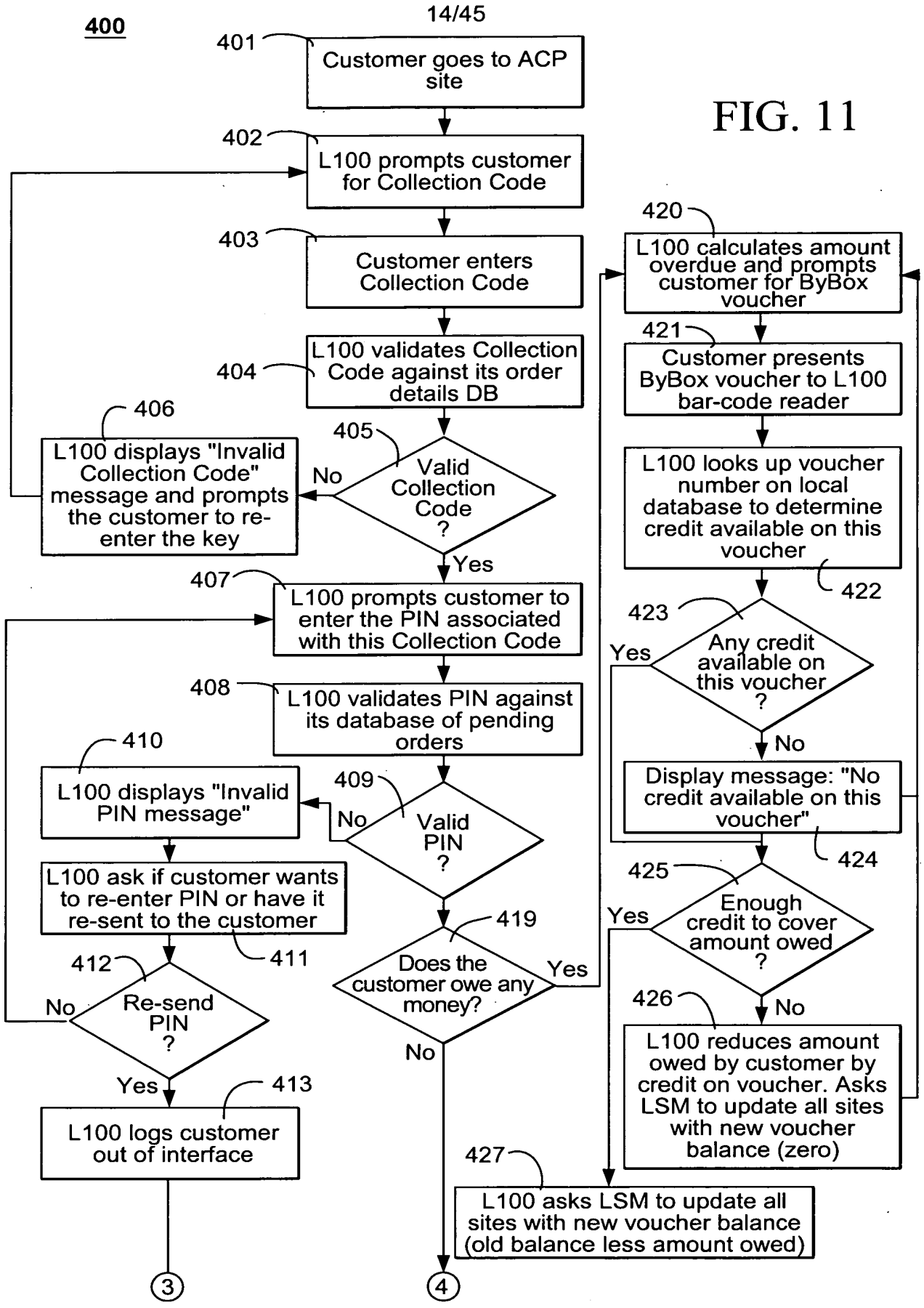

400
401
Customer goes to ACP site
402
L100 prompts customer for Collection Code
403
Customer enters Collection Code
404
L100 validates Collection Code against its order details DB
405
Valid Collection Code ?
No
406
L100 displays "Invalid Collection Code" message and prompts the customer to re-enter the key
Yes
407
L100 prompts customer to enter the PIN associated with this Collection Code
408
L100 validates PIN against its database of pending orders
409
Valid PIN ?
No
410
L100 displays "Invalid PIN message"
L100 ask if customer wants to re-enter PIN or have it re-sent to the customer
411
412
Re-send PIN ?
No
Yes
413
L100 logs customer out of interface
3
419
Does the customer owe any money?
Yes
No
4
420
L100 calculates amount overdue and prompts customer for ByBox voucher
421
Customer presents ByBox voucher to L100 bar-code reader
L100 looks up voucher number on local database to determine credit available on this voucher
422
423
Any credit available on this voucher ?
Yes
No
Display message: "No credit available on this voucher"
424
425
Enough credit to cover amount owed ?
Yes
No
426
L100 reduces amount owed by customer by credit on voucher. Asks LSM to update all sites with new voucher balance (zero)
427
L100 asks LSM to update all sites with new voucher balance (old balance less amount owed)

FIG. 11

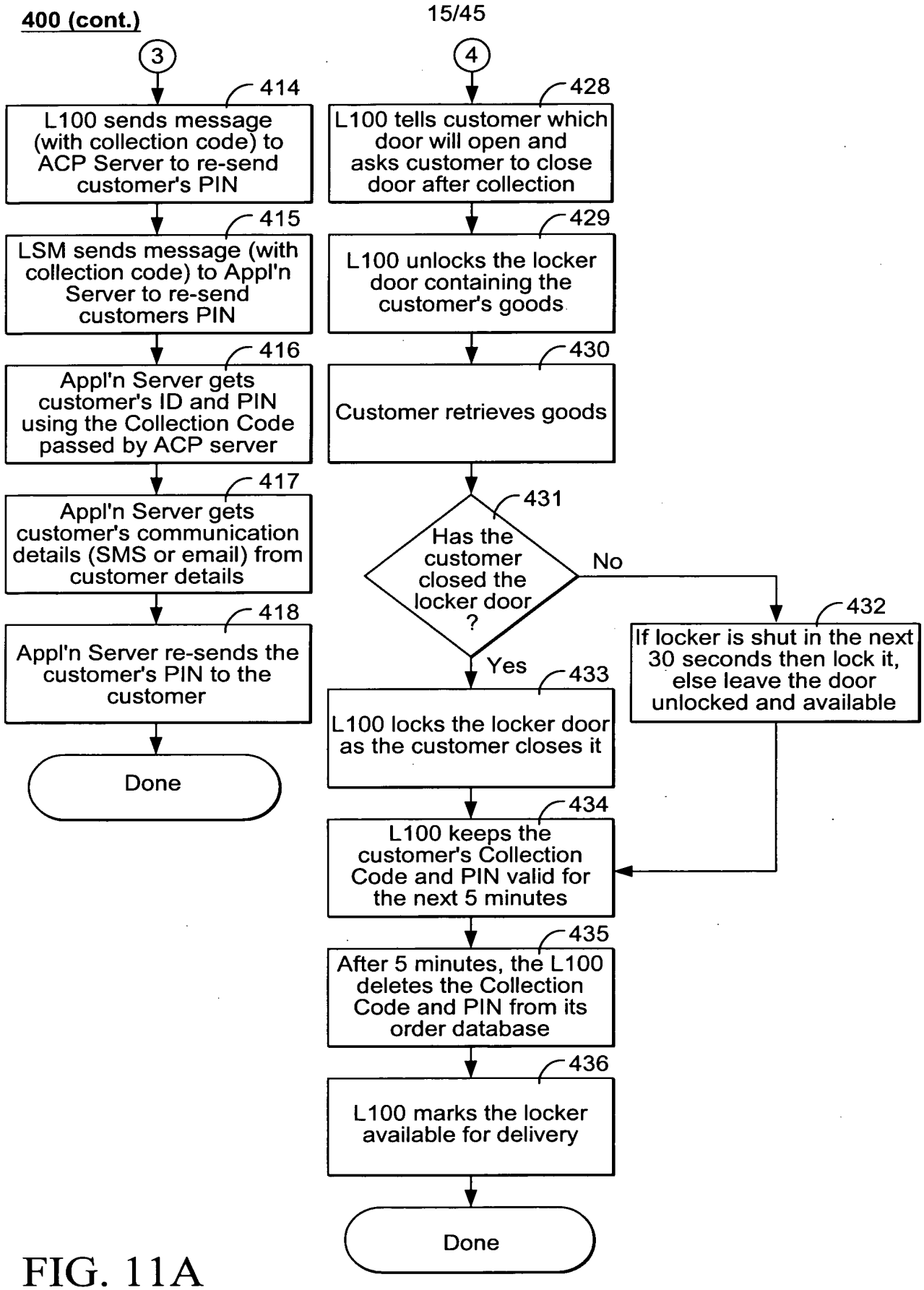

400 (cont.)
3
414
L100 sends message (with collection code) to ACP Server to re-send customer's PIN
415
LSM sends message (with collection code) to Appl'n Server to re-send customers PIN
416
Appl'n Server gets customer's ID and PIN using the Collection Code passed by ACP server
417
Appl'n Server gets customer's communication details (SMS or email) from customer details
418
Appl'n Server re-sends the customer's PIN to the customer
Done
4
428
L100 tells customer which door will open and asks customer to close door after collection
429
L100 unlocks the locker door containing the customer's goods
430
Customer retrieves goods
431
Has the customer closed the locker door ?
No
Yes
432
If locker is shut in the next 30 seconds then lock it, else leave the door unlocked and available
433
L100 locks the locker door as the customer closes it
434
L100 keeps the customer's Collection Code and PIN valid for the next 5 minutes
435
After 5 minutes, the L100 deletes the Collection Code and PIN from its order database
436
L100 marks the locker available for delivery
Done

FIG. 11A

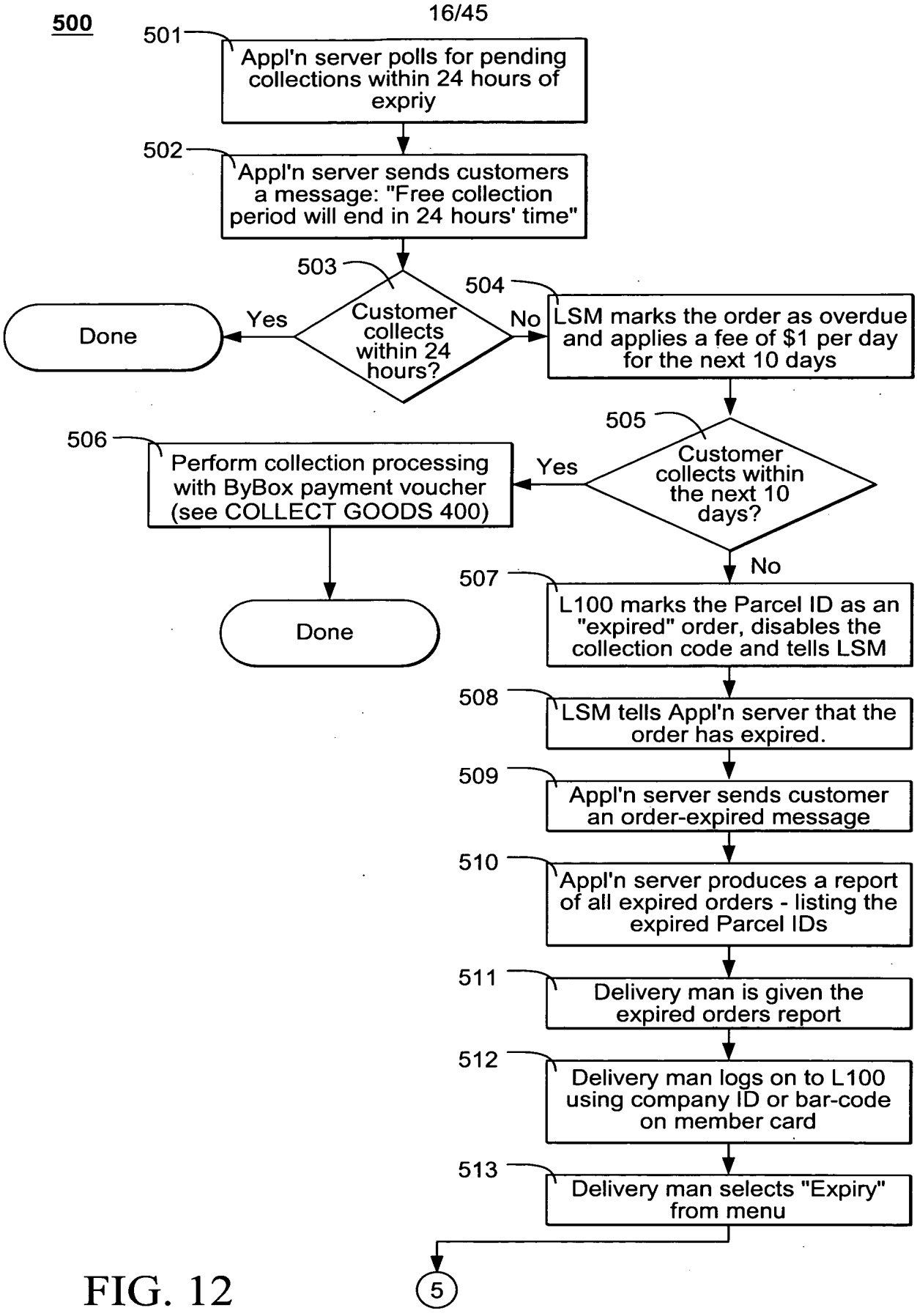

500
501
Appl'n server polls for pending collections within 24 hours of expriy
502
Appl'n server sends customers a message: "Free collection period will end in 24 hours' time"
503
Customer collects within 24 hours?
Yes
Done
504
No
LSM marks the order as overdue and applies a fee of $1 per day for the next 10 days
505
Customer collects within the next 10 days?
Yes
506
Perform collection processing with ByBox payment voucher (see COLLECT GOODS 400)
Done
No
507
L100 marks the Parcel ID as an "expired" order, disables the collection code and tells LSM
508
LSM tells Appl'n server that the order has expired.
509
Appl'n server sends customer an order-expired message
510
Appl'n server produces a report of all expired orders - listing the expired Parcel IDs
511
Delivery man is given the expired orders report
512
Delivery man logs on to L100 using company ID or bar-code on member card
513
Delivery man selects "Expiry" from menu
5

FIG. 12

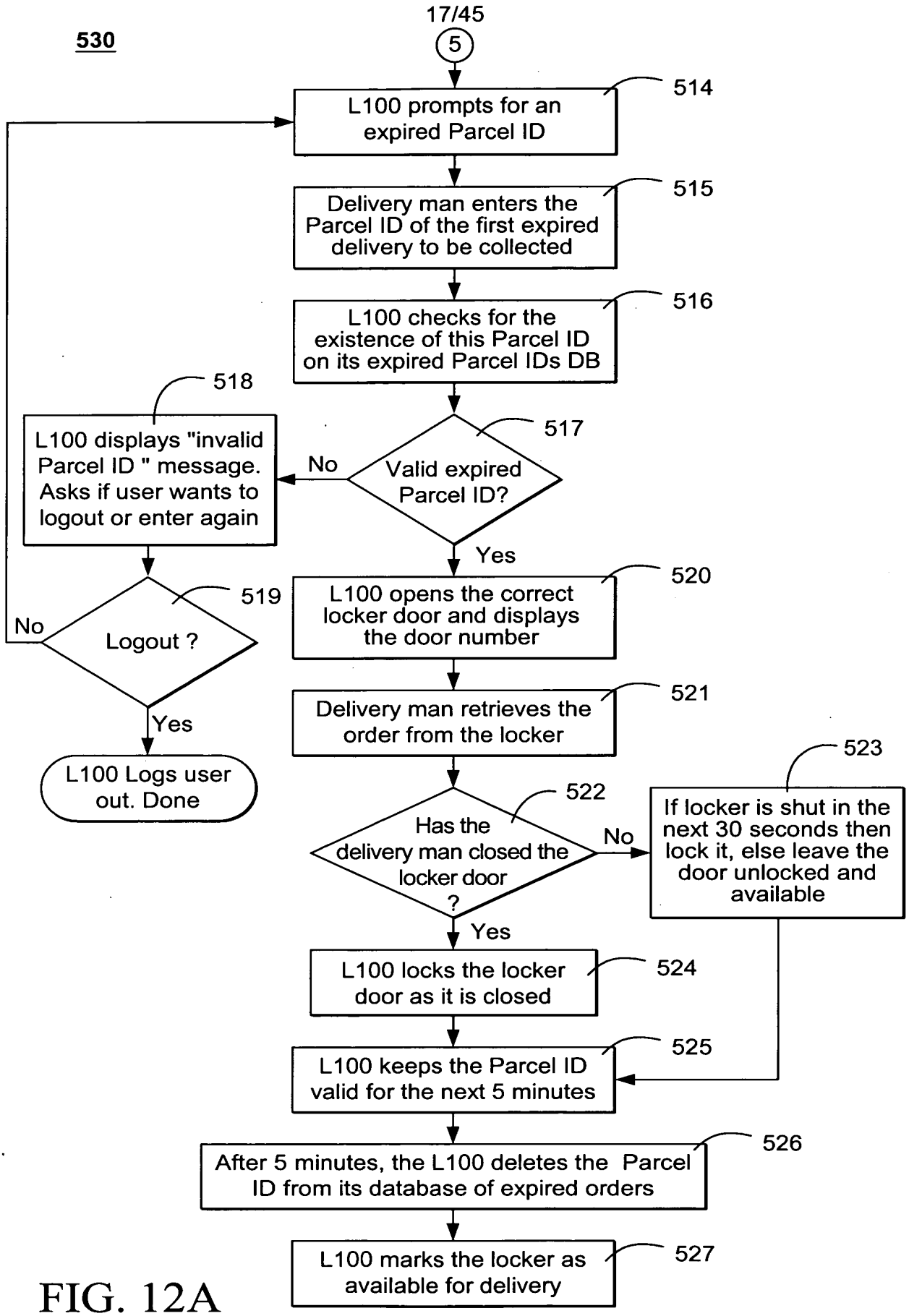

530
5
514
L100 prompts for an expired Parcel ID
515
Delivery man enters the Parcel ID of the first expired delivery to be collected
516
L100 checks for the existence of this Parcel ID on its expired Parcel IDs DB
517
Valid expired Parcel ID?
No
518
L100 displays "invalid Parcel ID " message. Asks if user wants to logout or enter again
519
Logout ?
No
Yes
L100 Logs user out. Done
Yes
520
L100 opens the correct locker door and displays the door number
521
Delivery man retrieves the order from the locker
522
Has the delivery man closed the locker door ?
No
523
If locker is shut in the next 30 seconds then lock it, else leave the door unlocked and available
Yes
524
L100 locks the locker door as it is closed
525
L100 keeps the Parcel ID valid for the next 5 minutes
526
After 5 minutes, the L100 deletes the Parcel ID from its database of expired orders
527
L100 marks the locker as available for delivery

FIG. 12A

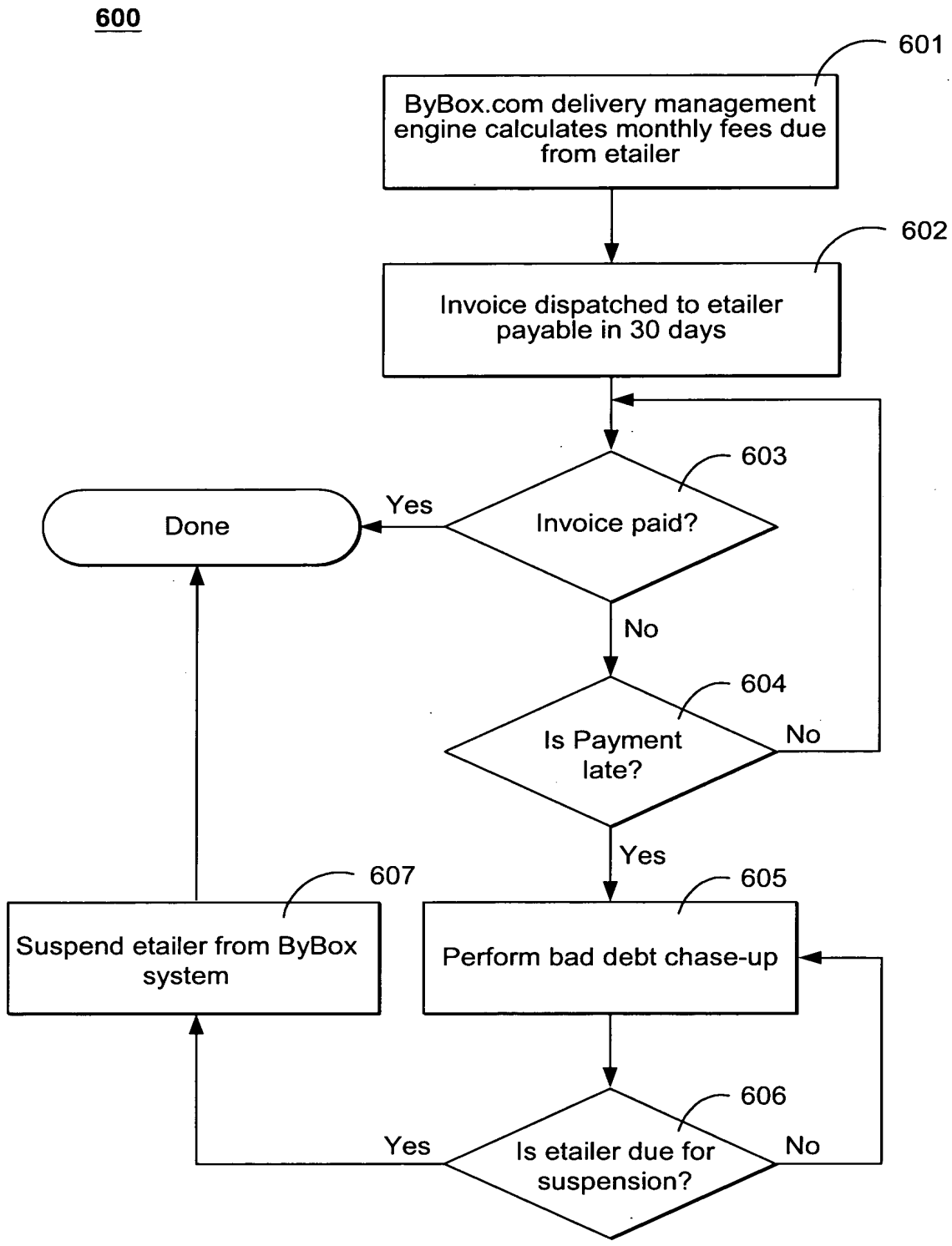

600
601
ByBox.com delivery management engine calculates monthly fees due from etailer
602
Invoice dispatched to etailer payable in 30 days
603
Invoice paid?
Yes
Done
No
604
Is Payment late?
No
Yes
605
Perform bad debt chase-up
606
Is etailer due for suspension?
Yes
No
607
Suspend etailer from ByBox system

FIG. 13

600 cont.

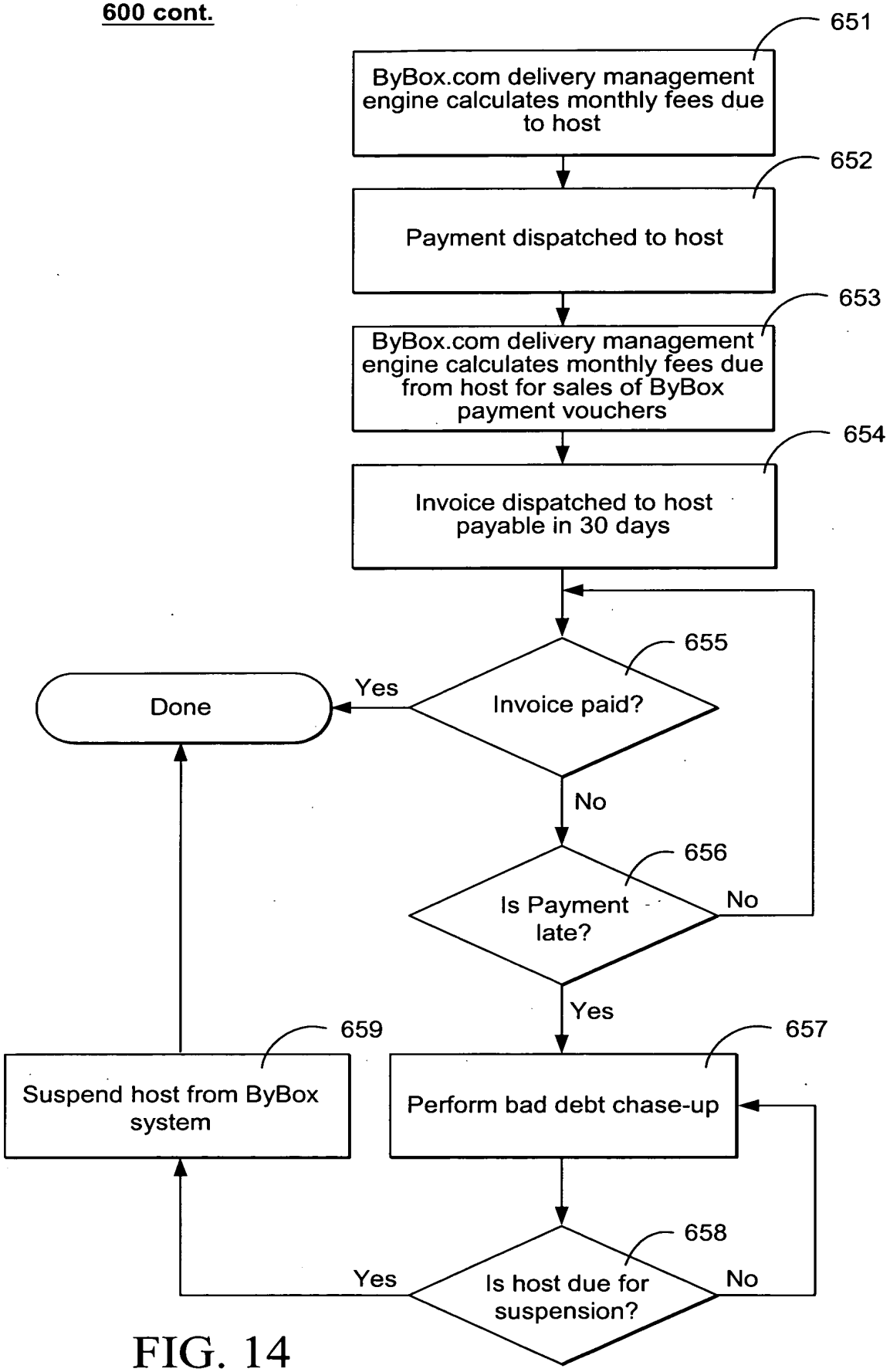


FIG. 14

Exhibit 2146 - 0976/0501

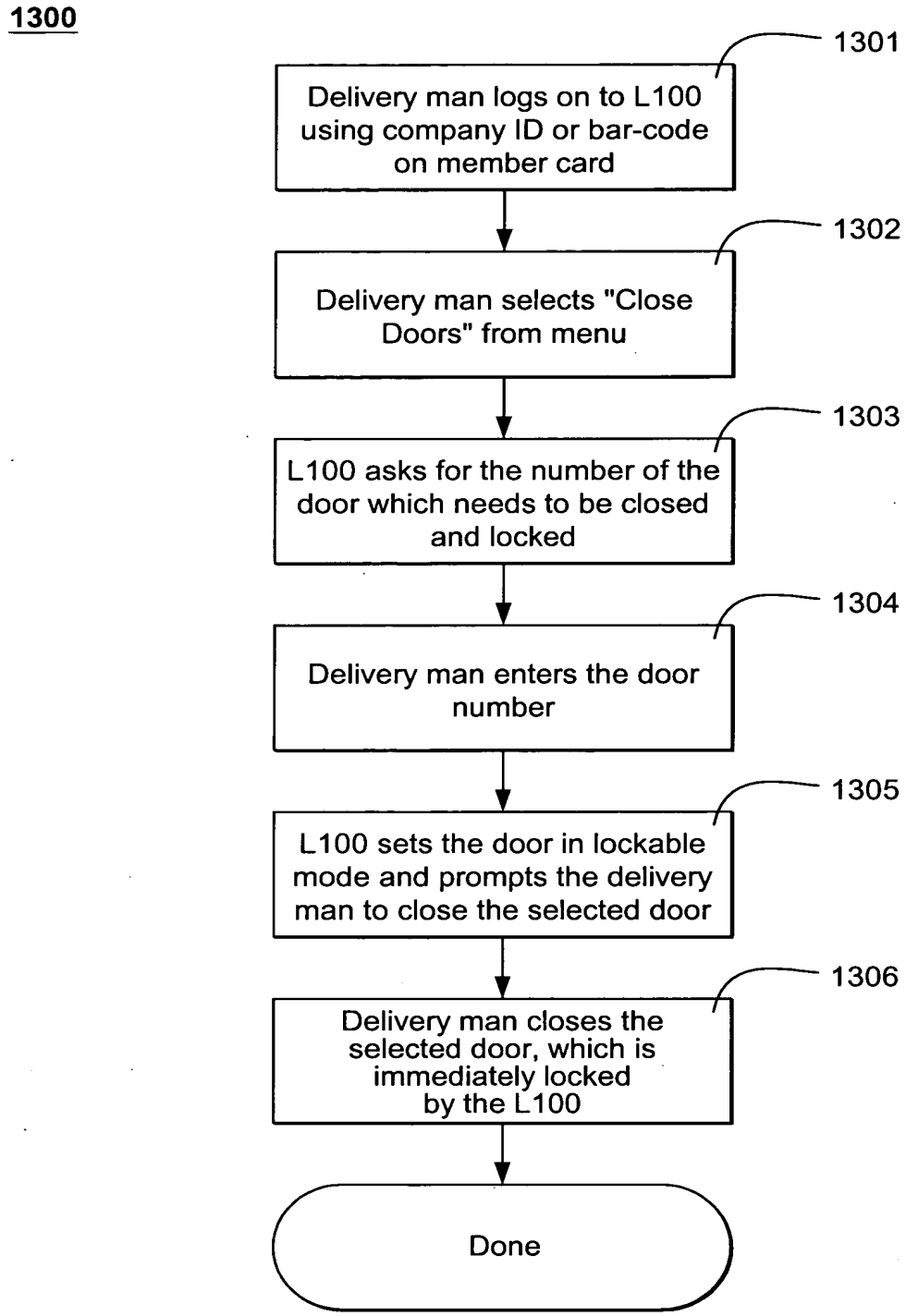

1300
1301
Delivery man logs on to L100 using company ID or bar-code on member card
1302
Delivery man selects "Close Doors" from menu
1303
L100 asks for the number of the door which needs to be closed and locked
1304
Delivery man enters the door number
1305
L100 sets the door in lockable mode and prompts the delivery man to close the selected door
1306
Delivery man closes the selected door, which is immediately locked by the L100
Done

FIG. 15

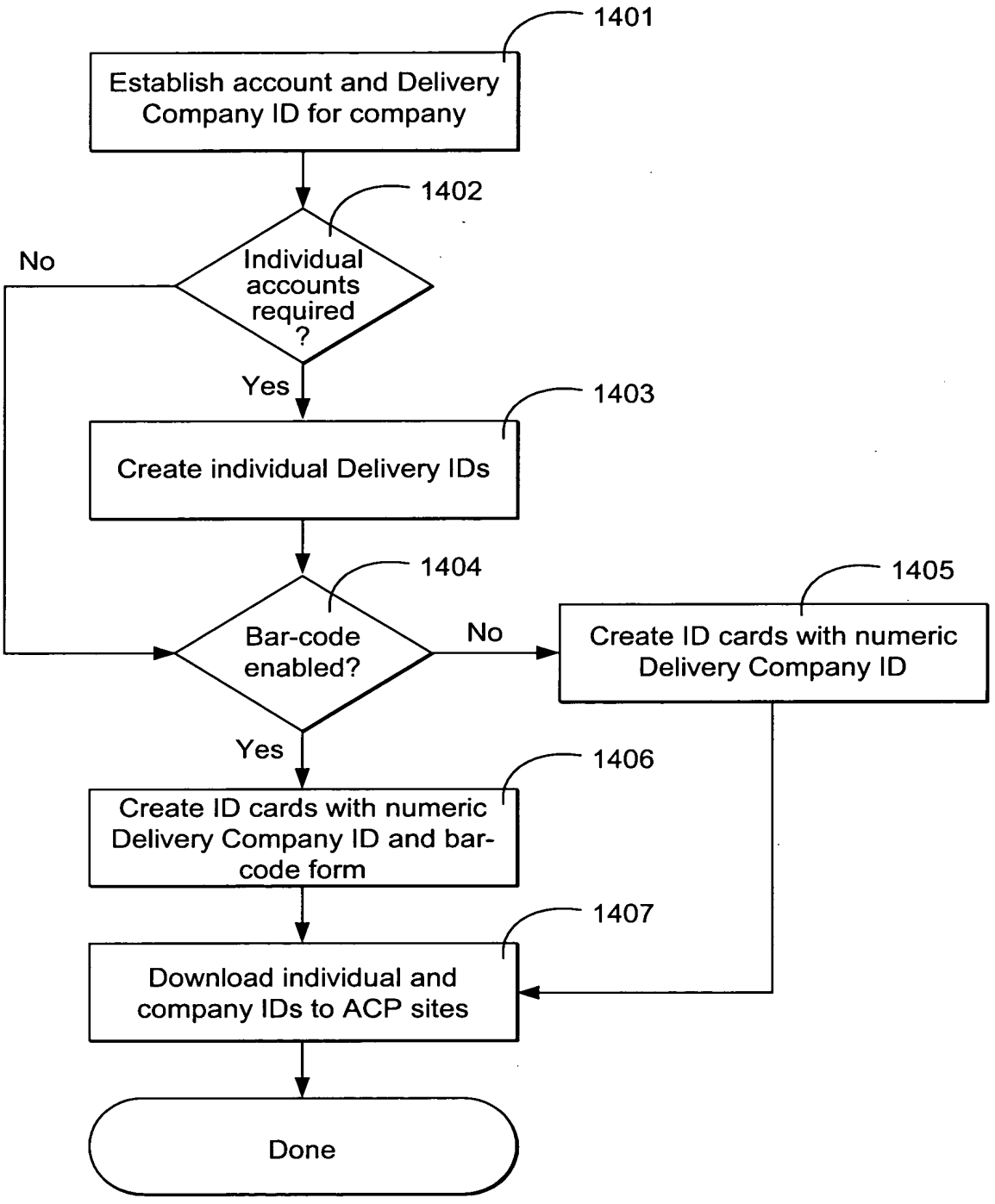

1400
1401
Establish account and Delivery Company ID for company
1402
Individual accounts required ?
No
Yes
1403
Create individual Delivery IDs
1404
Bar-code enabled?
No
1405
Create ID cards with numeric Delivery Company ID
Yes
1406
Create ID cards with numeric Delivery Company ID and bar-code form
1407
Download individual and company IDs to ACP sites
Done

FIG. 16

1500

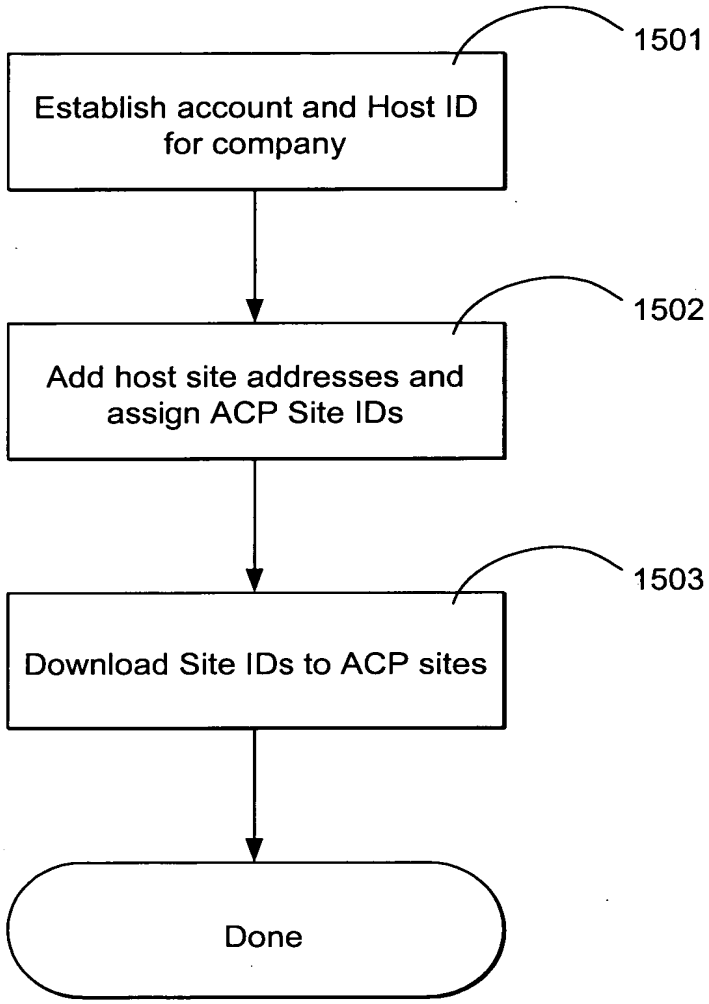

1501
Establish account and Host ID for company
1502
Add host site addresses and assign ACP Site IDs
1503
Download Site IDs to ACP sites
Done

FIG. 17

1600

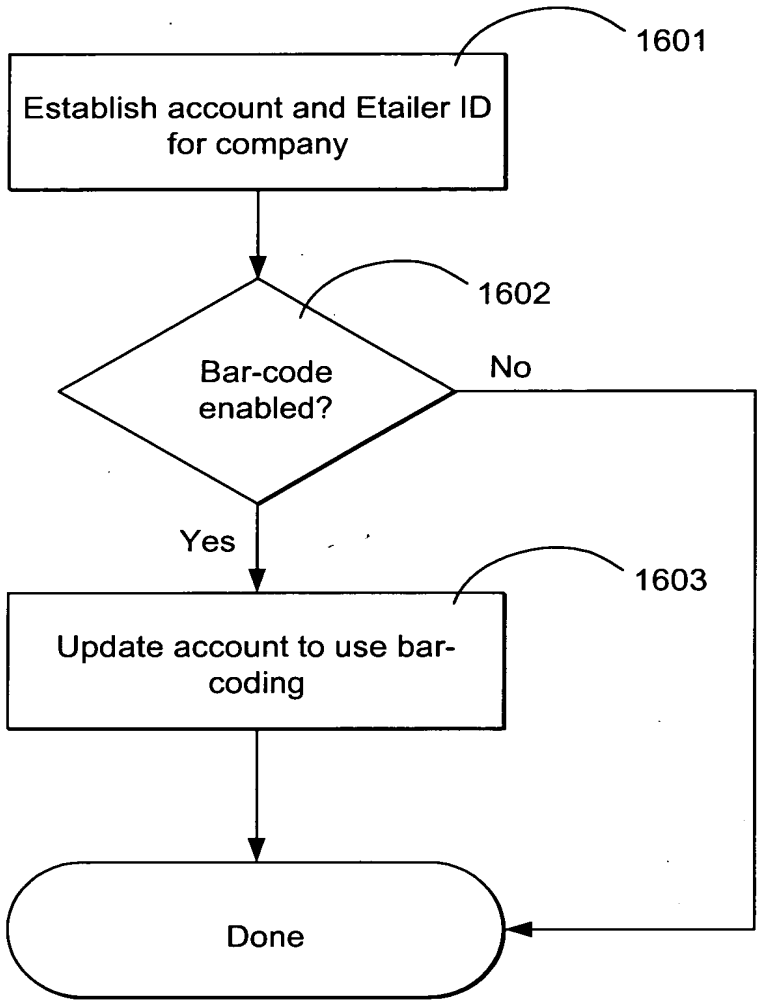

1601
Establish account and Etailer ID for company
1602
Bar-code enabled?
No
Yes
1603
Update account to use bar-coding
Done

FIG. 18

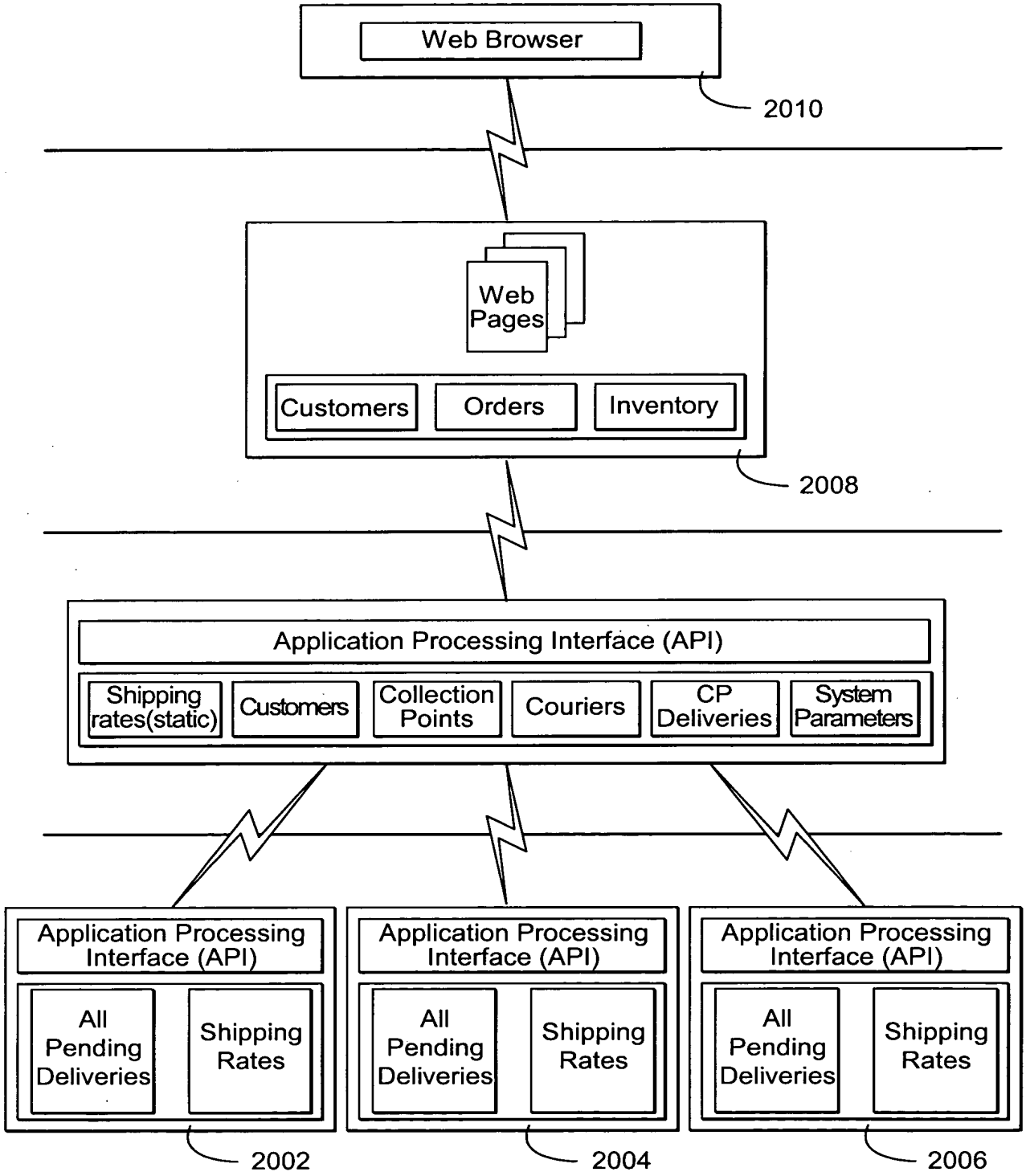

Web Browser
2010
Web Pages
Customers
Orders
Inventory
2008
Application Processing Interface (API)
Shipping rates(static)
Customers
Collection Points
Couriers
CP Deliveries
System Parameters
Application Processing Interface (API)
All Pending Deliveries
Shipping Rates
2002
Application Processing Interface (API)
All Pending Deliveries
Shipping Rates
2004
Application Processing Interface (API)
All Pending Deliveries
Shipping Rates
2006
2000

FIG. 19

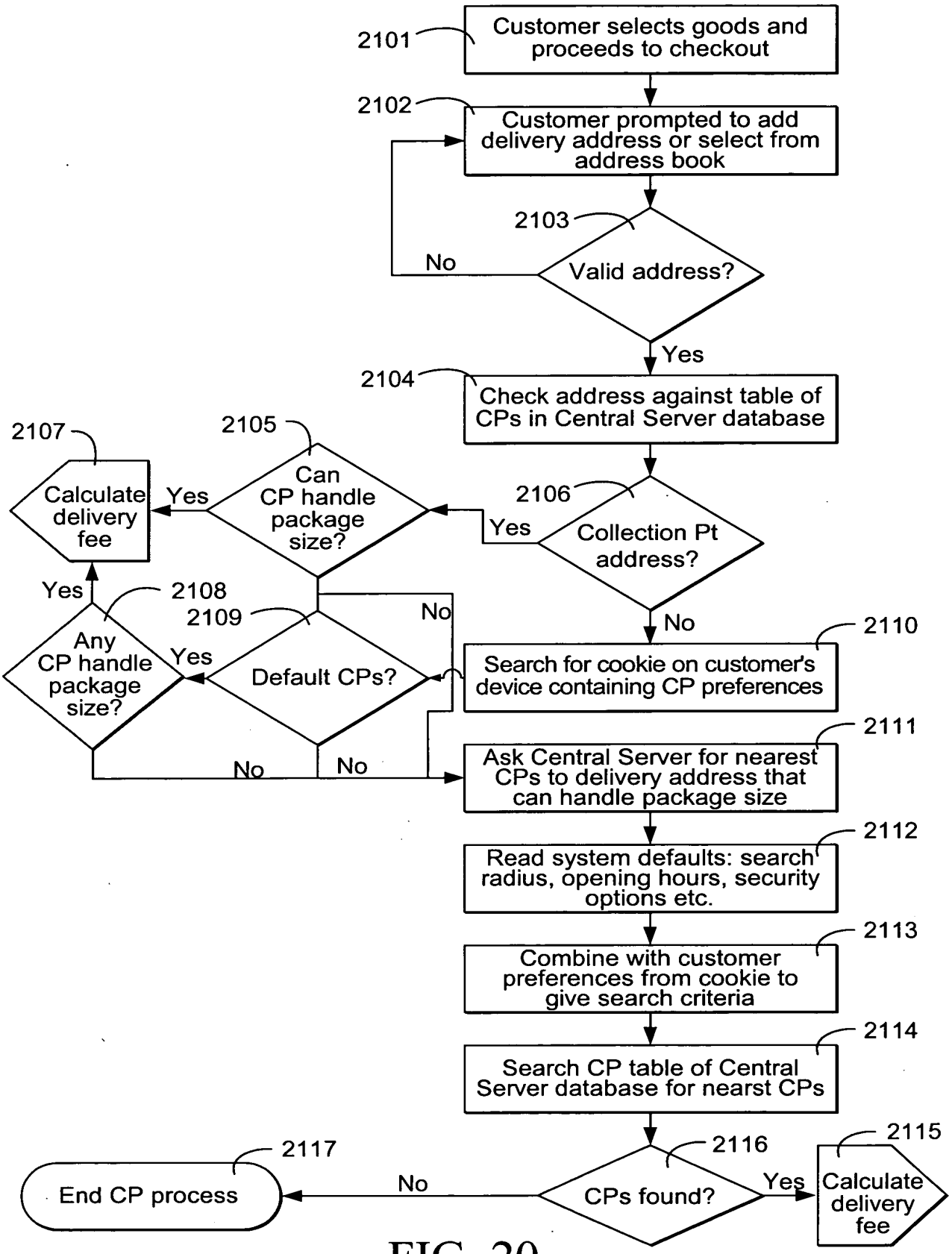

2101
Customer selects goods and proceeds to checkout
2102
Customer prompted to add delivery address or select from address book
2103
Valid address?
No
Yes
2104
Check address against table of CPs in Central Server database
2106
Collection Pt address?
Yes
No
2105
Can CP handle package size?
Yes
2107
Calculate delivery fee
2108
Any CP handle package size?
Yes
2109
Default CPs?
Yes
No
No
No
2110
Search for cookie on customer's device containing CP preferences
2111
Ask Central Server for nearest CPs to delivery address that can handle package size
2112
Read system defaults: search radius, opening hours, security options etc.
2113
Combine with customer preferences from cookie to give search criteria
2114
Search CP table of Central Server database for nearst CPs
2116
CPs found?
No
Yes
2117
End CP process
2115
Calculate delivery fee

FIG. 20

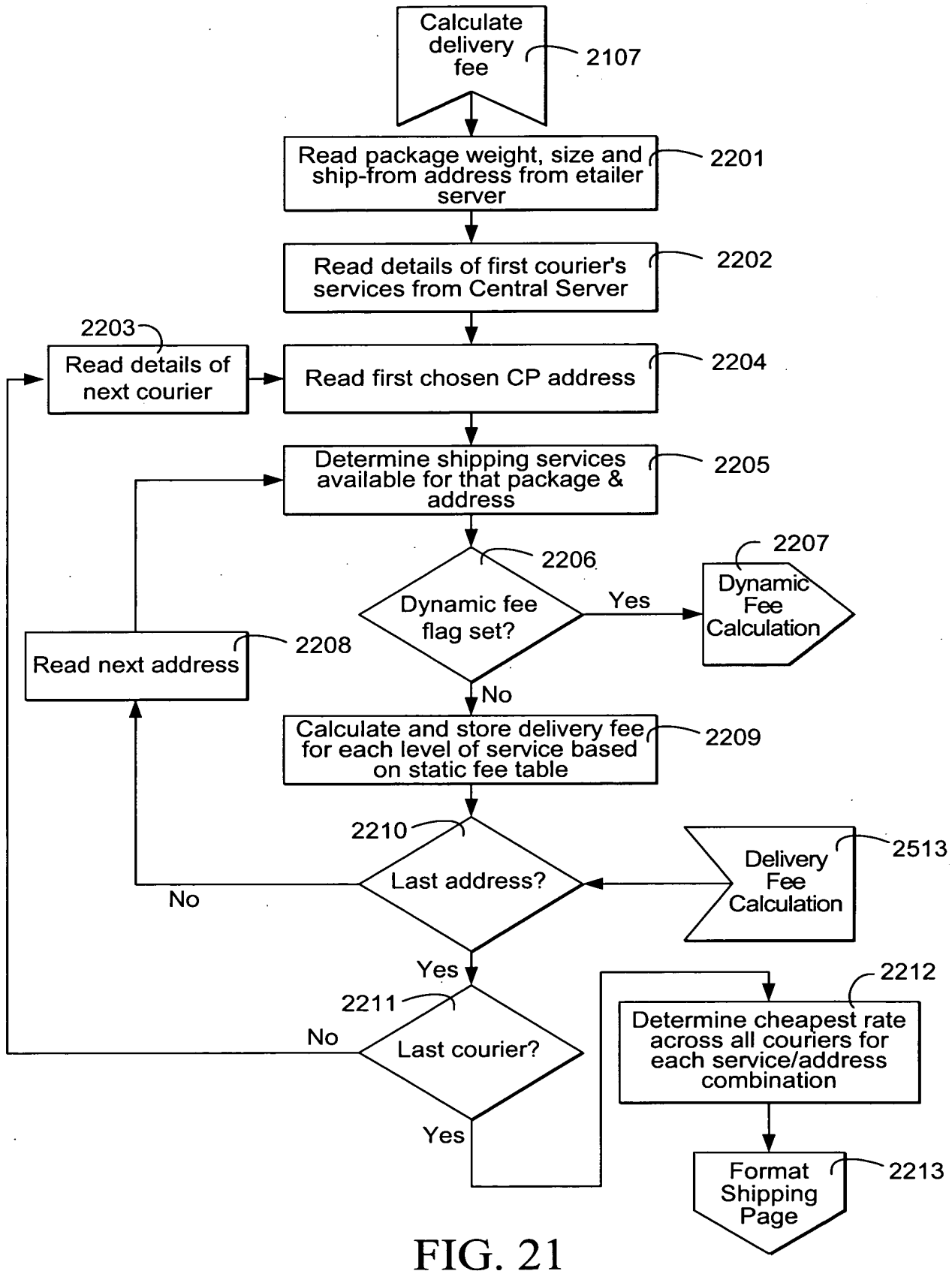

Calculate delivery fee
2107
Read package weight, size and ship-from address from etailer server
2201
Read details of first courier's services from Central Server
2202
2203
Read details of next courier
Read first chosen CP address
2204
Determine shipping services available for that package & address
2205
2206
Dynamic fee flag set?
Yes
2207
Dynamic Fee Calculation
Read next address
2208
No
Calculate and store delivery fee for each level of service based on static fee table
2209
2210
Last address?
No
Delivery Fee Calculation
2513
Yes
2211
Last courier?
No
Yes
2212
Determine cheapest rate across all couriers for each service/address combination
Format Shipping Page
2213

FIG. 21

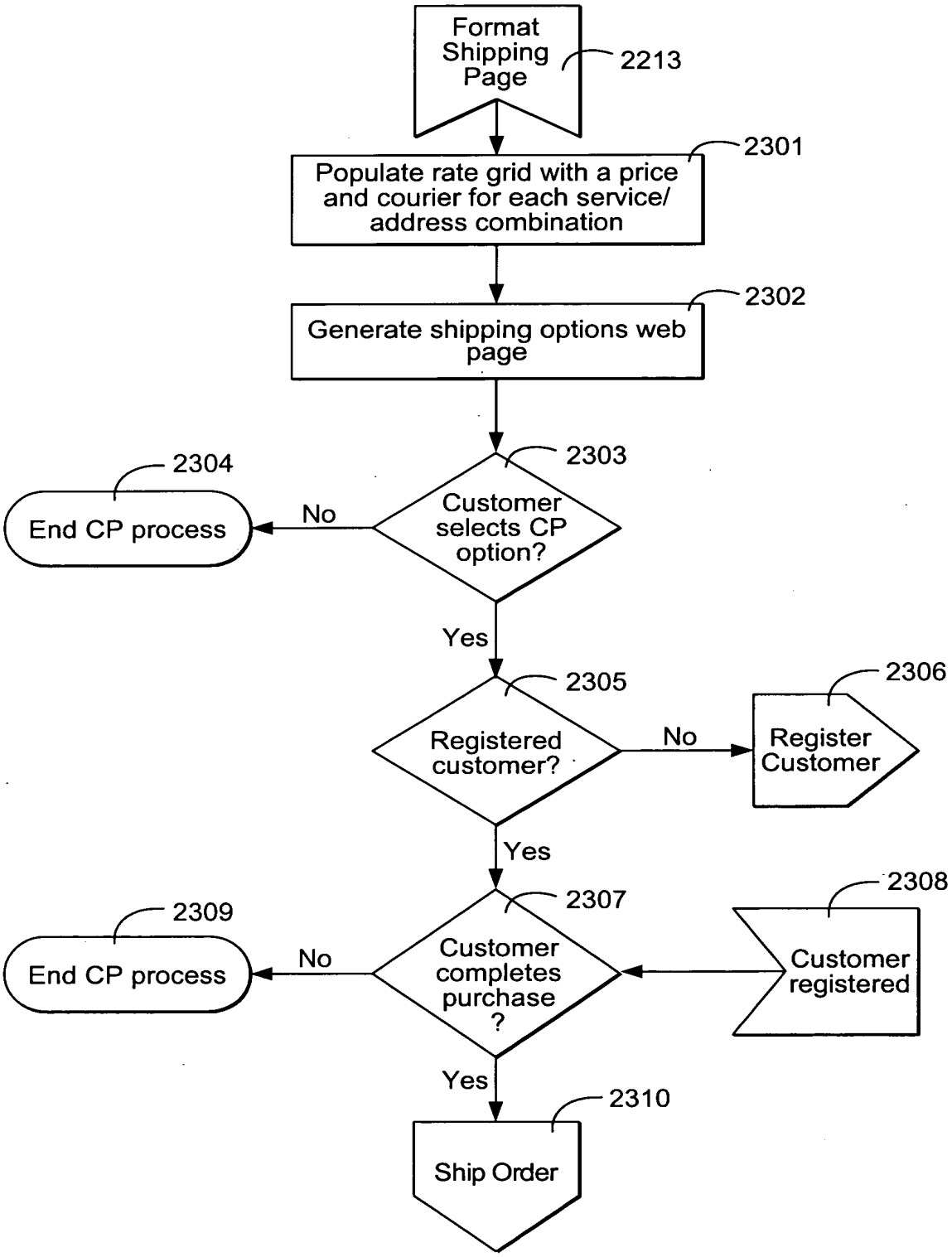

Format Shipping Page
2213
Populate rate grid with a price and courier for each service/ address combination
2301
Generate shipping options web page
2302
Customer selects CP option?
2303
No
End CP process
2304
Yes
Registered customer?
2305
No
Register Customer
2306
Yes
Customer completes purchase ?
2307
No
End CP process
2309
Customer registered
2308
Yes
Ship Order
2310

FIG. 22

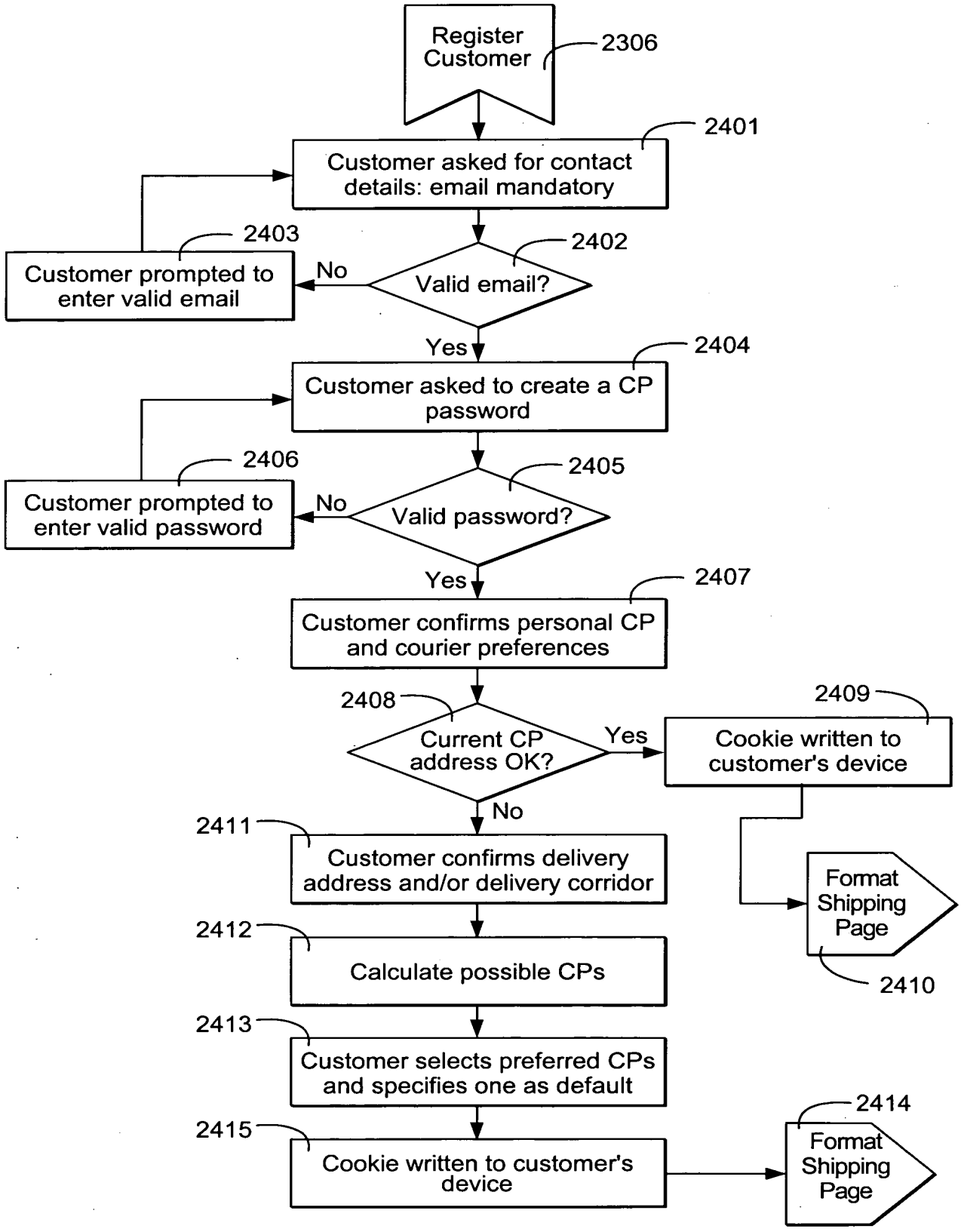

Register Customer
2306
2401
Customer asked for contact details: email mandatory
2403
Customer prompted to enter valid email
No
2402
Valid email?
Yes
2404
Customer asked to create a CP password
2406
Customer prompted to enter valid password
No
2405
Valid password?
Yes
2407
Customer confirms personal CP and courier preferences
2408
Current CP address OK?
Yes
2409
Cookie written to customer's device
No
2411
Customer confirms delivery address and/or delivery corridor
Format Shipping Page
2410
2412
Calculate possible CPs
2413
Customer selects preferred CPs and specifies one as default
2414
2415
Cookie written to customer's device
Format Shipping Page

FIG. 23

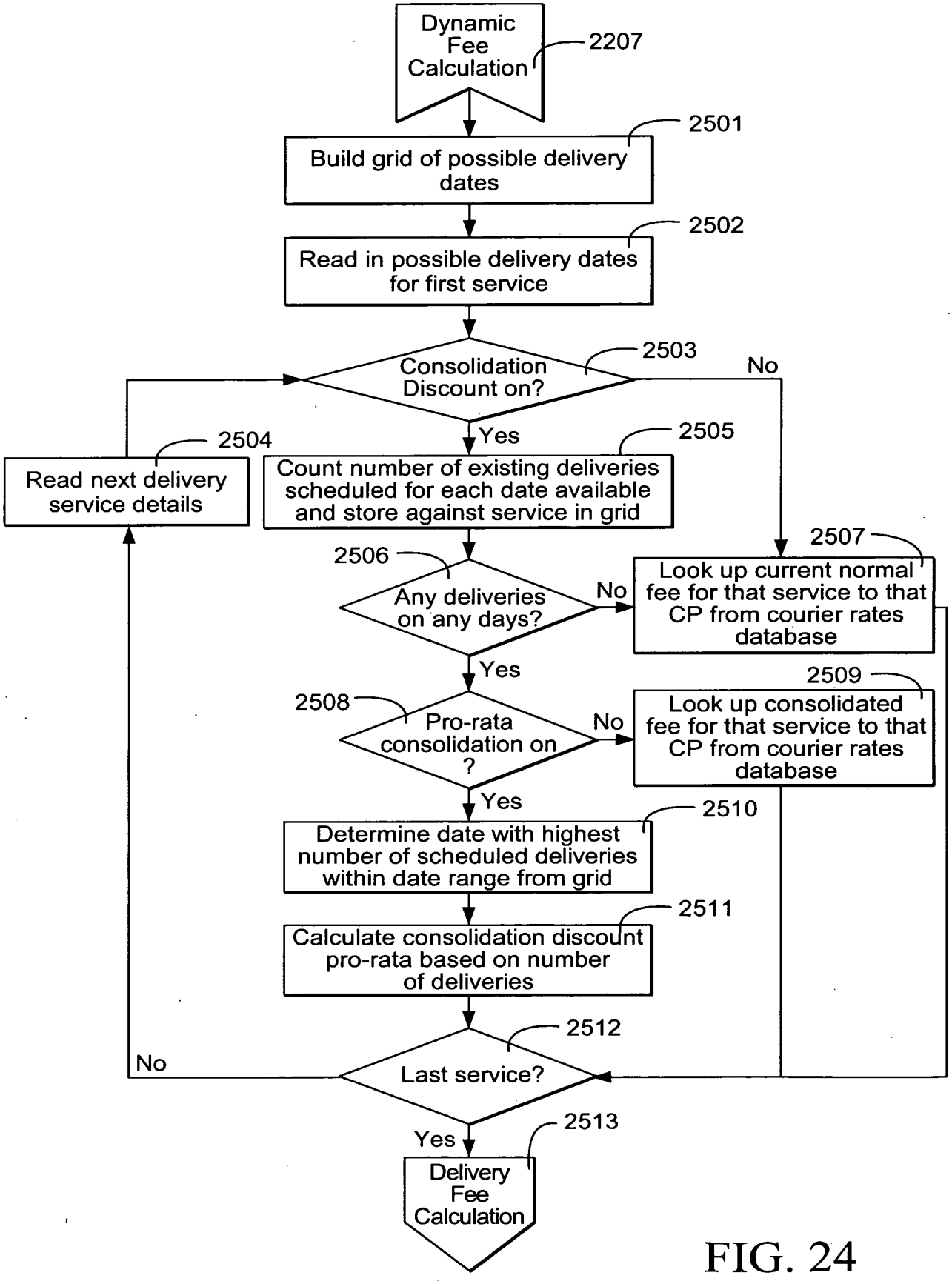

Dynamic Fee Calculation
2207
2501
Build grid of possible delivery dates
2502
Read in possible delivery dates for first service
2503
Consolidation Discount on?
No
Yes
2504
Read next delivery service details
2505
Count number of existing deliveries scheduled for each date available and store against service in grid
2506
Any deliveries on any days?
No
2507
Look up current normal fee for that service to that CP from courier rates database
Yes
2508
Pro-rata consolidation on ?
No
2509
Look up consolidated fee for that service to that CP from courier rates database
Yes
2510
Determine date with highest number of scheduled deliveries within date range from grid
2511
Calculate consolidation discount pro-rata based on number of deliveries
2512
Last service?
No
Yes
2513
Delivery Fee Calculation

FIG. 24

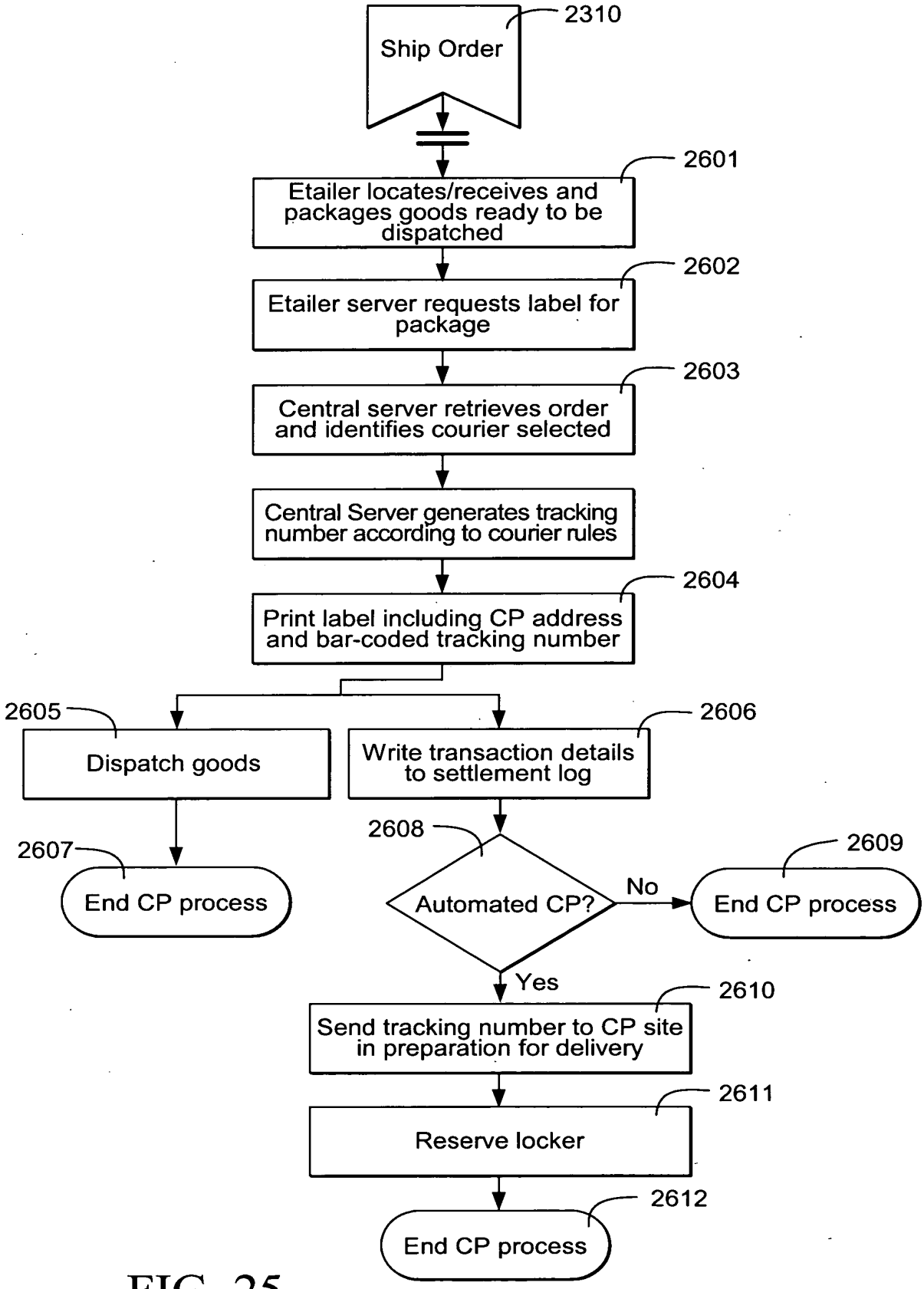

Ship Order
2310
Etailer locates/receives and packages goods ready to be dispatched
2601
Etailer server requests label for package
2602
Central server retrieves order and identifies courier selected
2603
Central Server generates tracking number according to courier rules
Print label including CP address and bar-coded tracking number
2604
Dispatch goods
2605
Write transaction details to settlement log
2606
End CP process
2607
Automated CP?
2608
No
End CP process
2609
Yes
Send tracking number to CP site in preparation for delivery
2610
Reserve locker
2611
End CP process
2612

FIG. 25

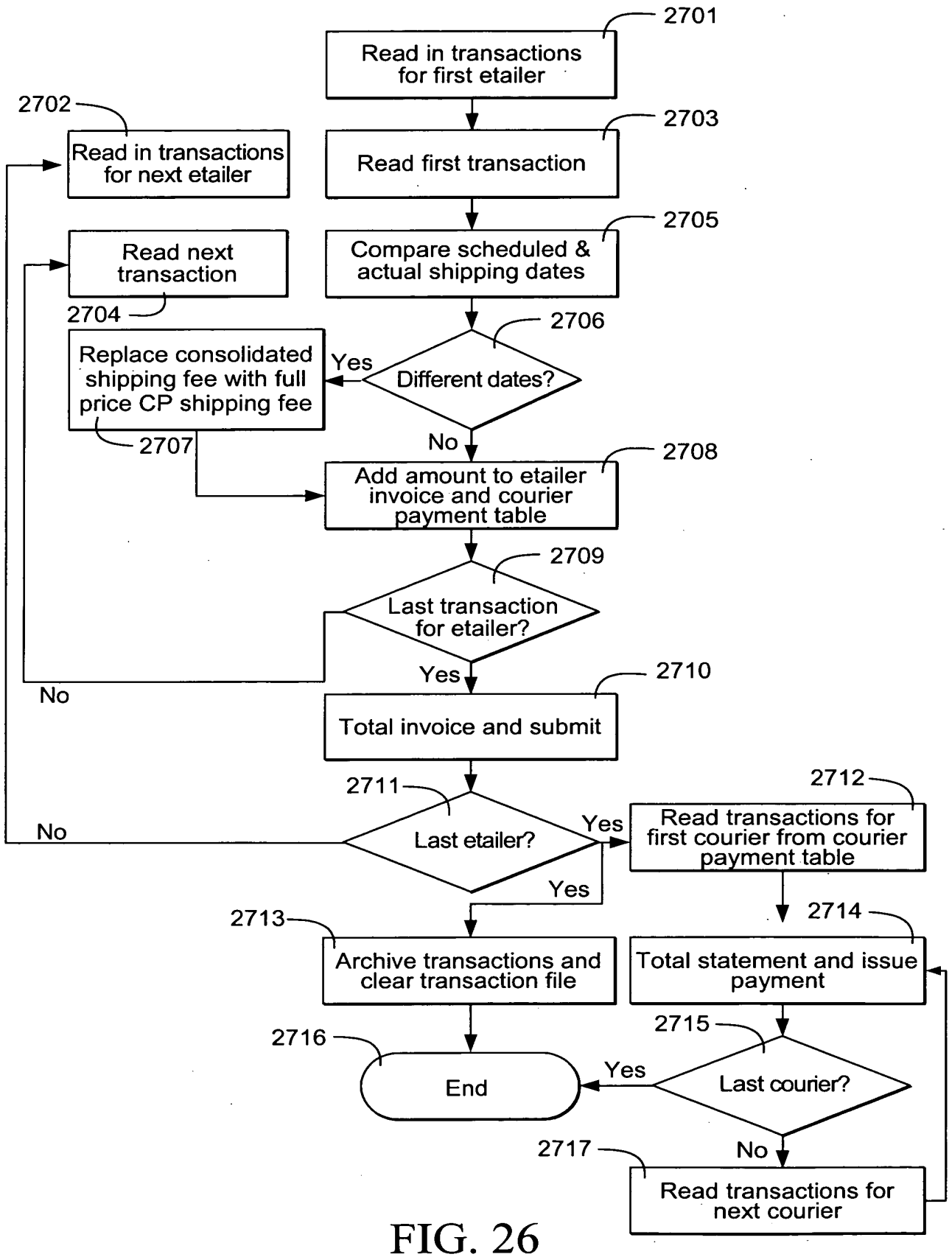

2701
Read in transactions for first etailer
2702
Read in transactions for next etailer
2703
Read first transaction
2705
Compare scheduled & actual shipping dates
Read next transaction
2704
2706
Replace consolidated shipping fee with full price CP shipping fee
Yes
Different dates?
No
2707
2708
Add amount to etailer invoice and courier payment table
2709
Last transaction for etailer?
Yes
No
2710
Total invoice and submit
2711
2712
Last etailer?
Yes
Read transactions for first courier from courier payment table
No
Yes
2713
2714
Archive transactions and clear transaction file
Total statement and issue payment
2715
2716
Yes
End
Last courier?
2717
No
Read transactions for next courier

FIG. 26

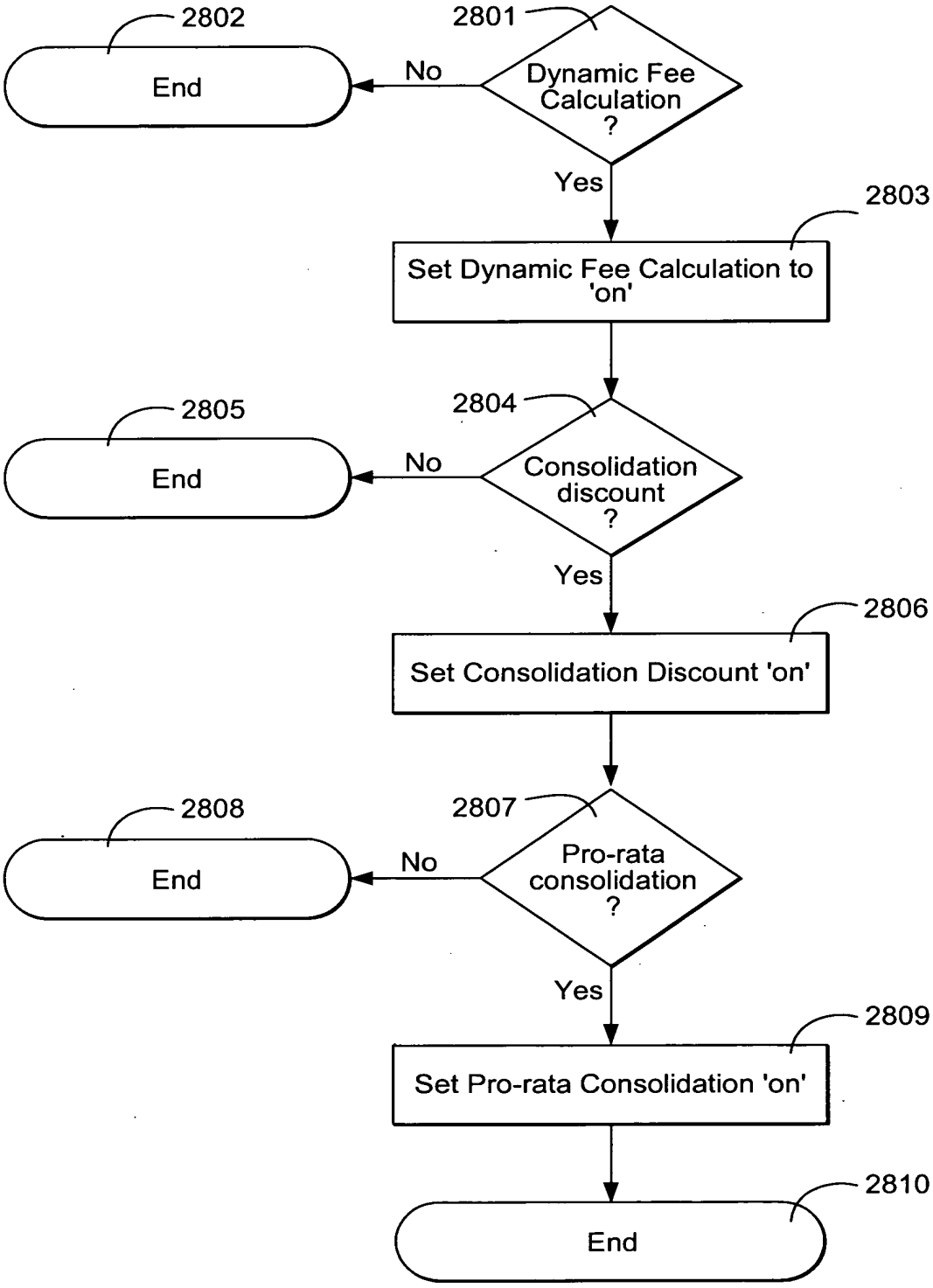

2801
Dynamic Fee Calculation ?
No
2802
End
Yes
2803
Set Dynamic Fee Calculation to 'on'
2804
Consolidation discount ?
No
2805
End
Yes
2806
Set Consolidation Discount 'on'
2807
Pro-rata consolidation ?
No
2808
End
Yes
2809
Set Pro-rata Consolidation 'on'
2810
End

FIG. 27

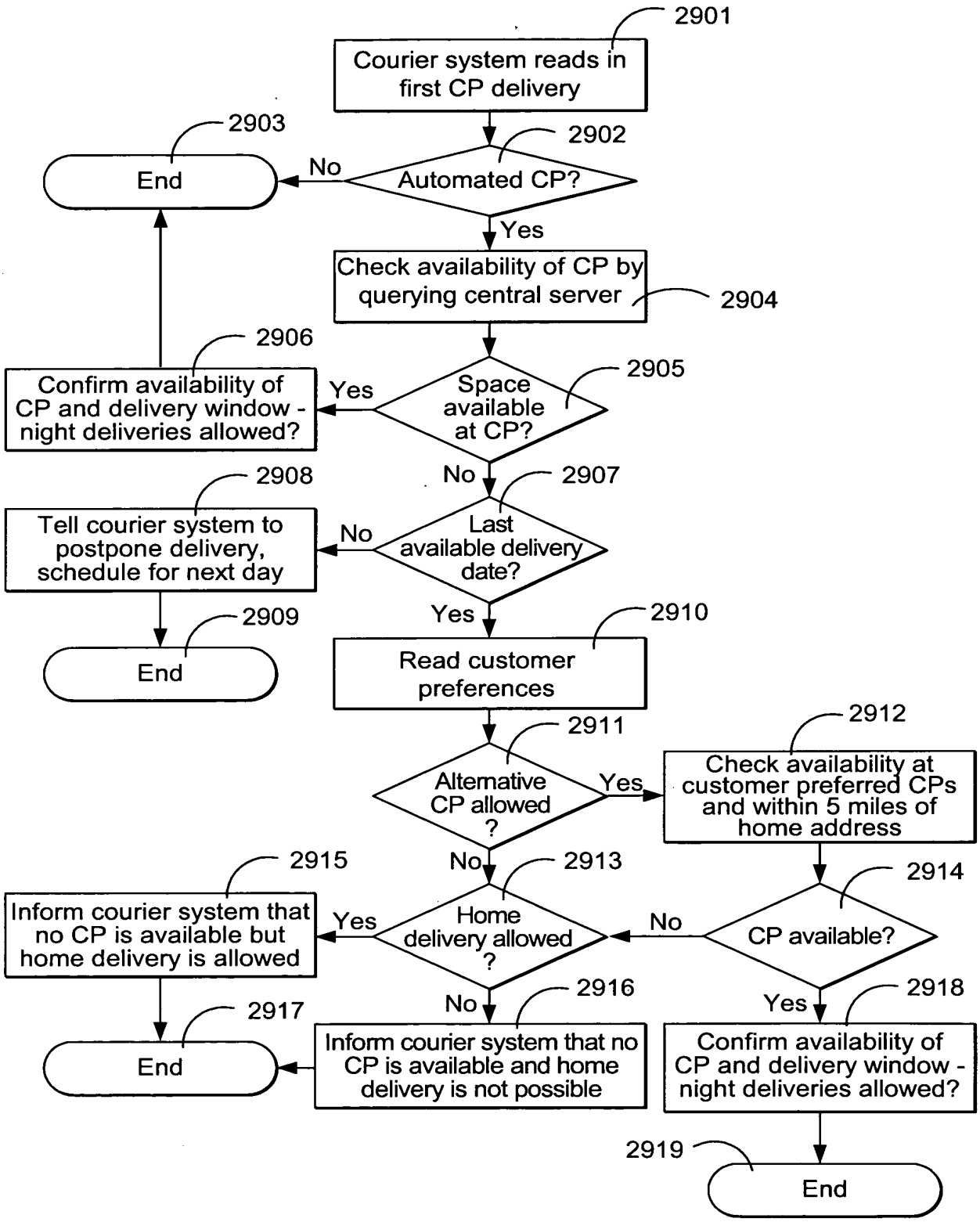

2901
Courier system reads in first CP delivery
2902
Automated CP?
No
2903
End
Yes
Check availability of CP by querying central server
2904
2905
Space available at CP?
Yes
2906
Confirm availability of CP and delivery window - night deliveries allowed?
No
2907
Last available delivery date?
No
2908
Tell courier system to postpone delivery, schedule for next day
2909
End
Yes
2910
Read customer preferences
2911
Alternative CP allowed ?
Yes
2912
Check availability at customer preferred CPs and within 5 miles of home address
No
2913
Home delivery allowed ?
Yes
2915
Inform courier system that no CP is available but home delivery is allowed
2914
CP available?
No
Yes
2916
Inform courier system that no CP is available and home delivery is not possible
2917
End
2918
Confirm availability of CP and delivery window - night deliveries allowed?
2919
End

FIG. 28

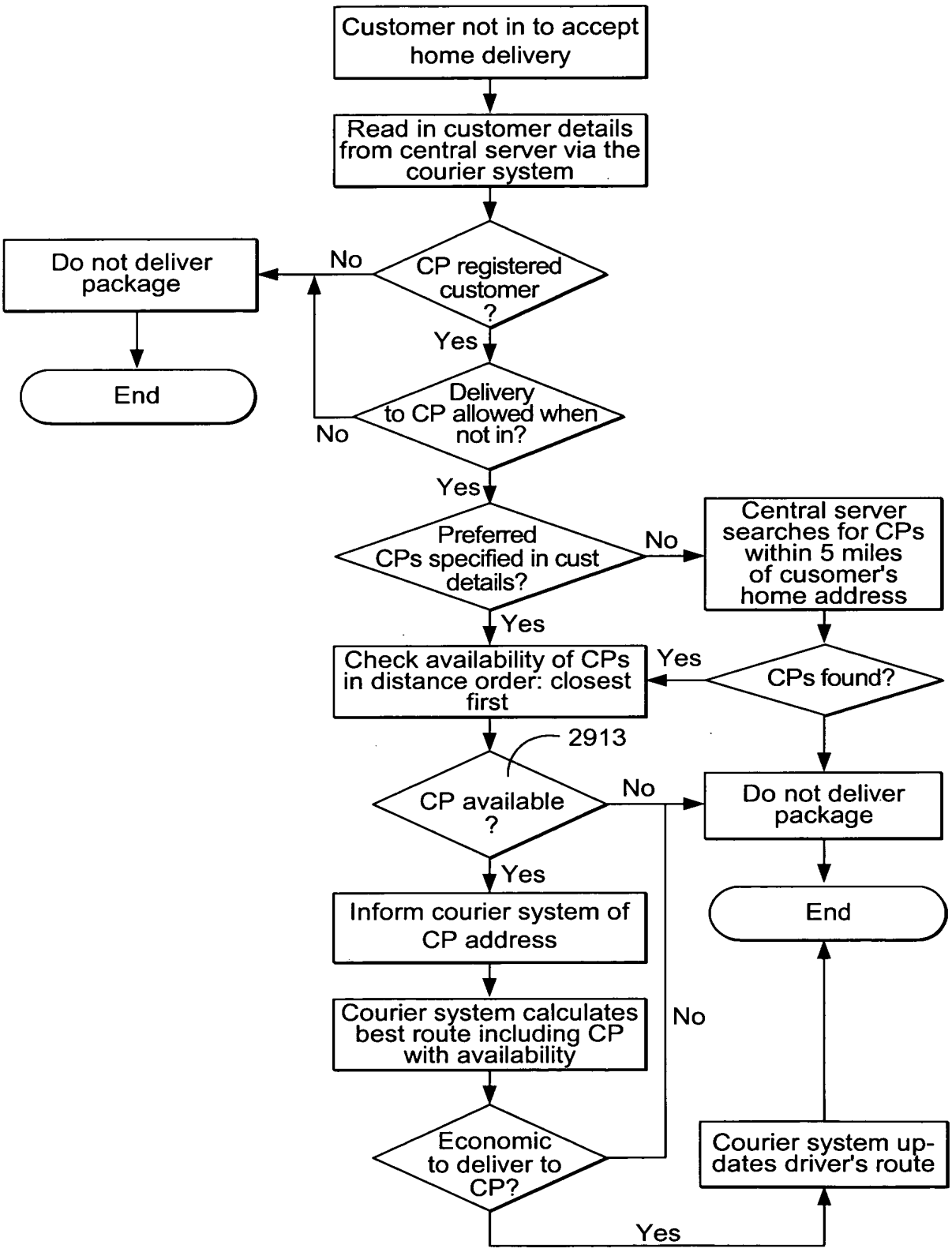

Customer not in to accept home delivery
Read in customer details from central server via the courier system
CP registered customer ?
No
Do not deliver package
End
Yes
Delivery to CP allowed when not in?
No
Yes
Preferred CPs specified in cust details?
No
Central server searches for CPs within 5 miles of cusomer's home address
Yes
CPs found?
Yes
Check availability of CPs in distance order: closest first
2913
CP available ?
No
Do not deliver package
Yes
End
Inform courier system of CP address
Courier system calculates best route including CP with availability
No
Economic to deliver to CP?
Courier system up-dates driver's route
Yes

FIG. 29

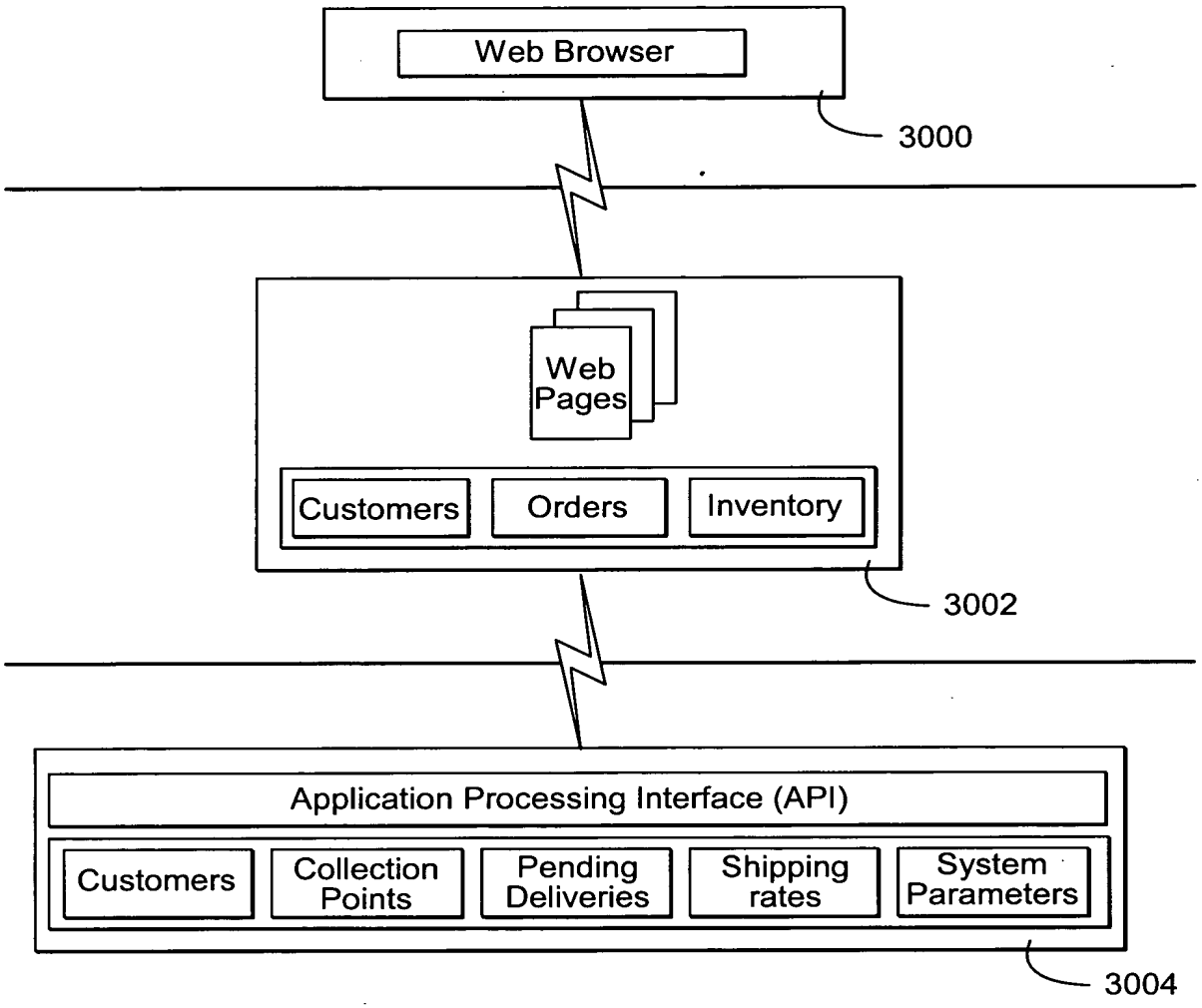

Web Browser
3000
Web Pages
Customers
Orders
Inventory
3002
Application Processing Interface (API)
Customers
Collection Points
Pending Deliveries
Shipping rates
System Parameters
3004

FIG. 30

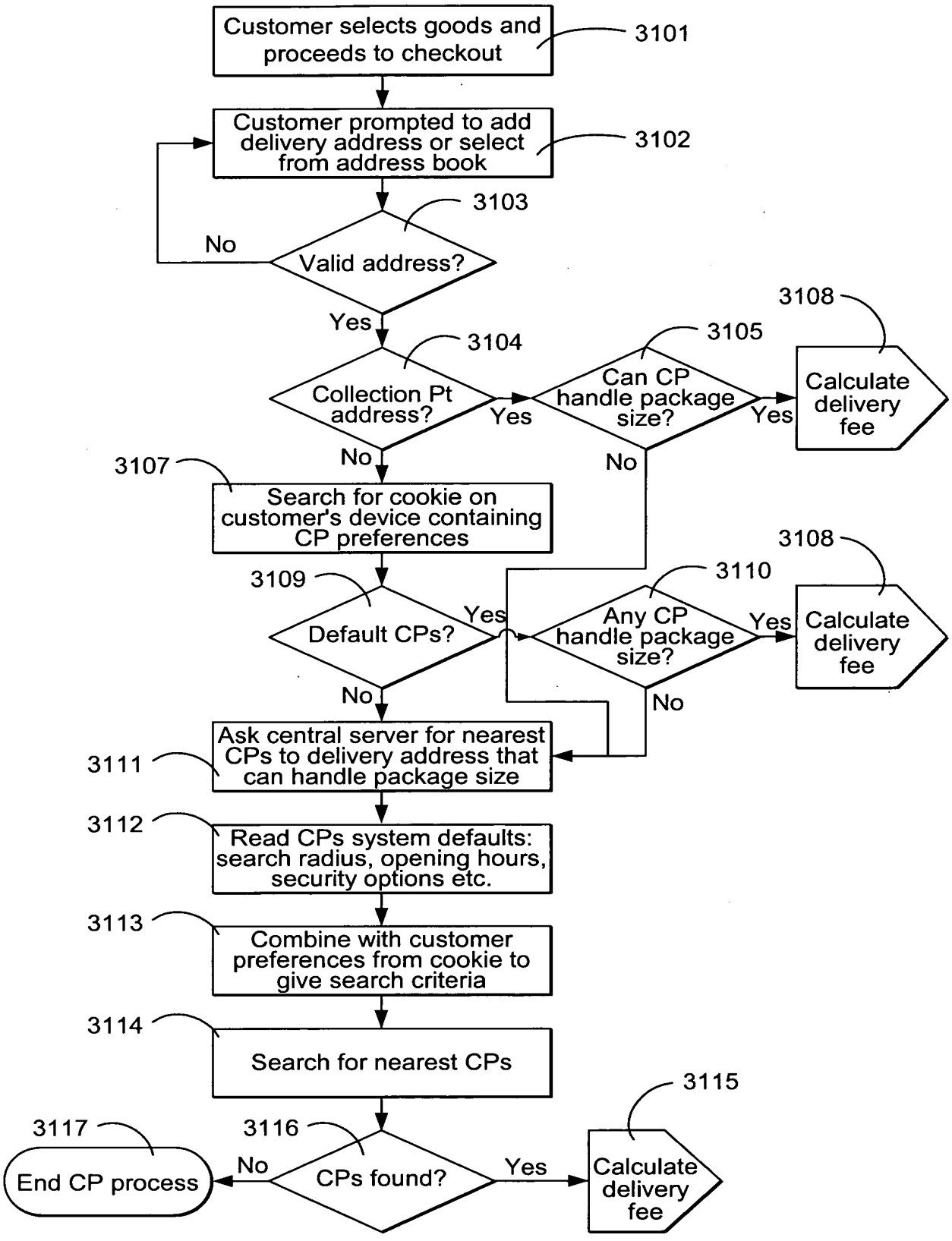

Customer selects goods and proceeds to checkout
3101
Customer prompted to add delivery address or select from address book
3102
3103
Valid address?
No
Yes
3104
Collection Pt address?
Yes
3105
Can CP handle package size?
Yes
3108
Calculate delivery fee
No
3107
Search for cookie on customer's device containing CP preferences
3109
Default CPs?
Yes
3110
Any CP handle package size?
Yes
3108
Calculate delivery fee
No
No
Ask central server for nearest CPs to delivery address that can handle package size
3111
3112
Read CPs system defaults: search radius, opening hours, security options etc.
3113
Combine with customer preferences from cookie to give search criteria
3114
Search for nearest CPs
3115
3117
3116
End CP process
No
CPs found?
Yes
Calculate delivery fee

FIG. 31

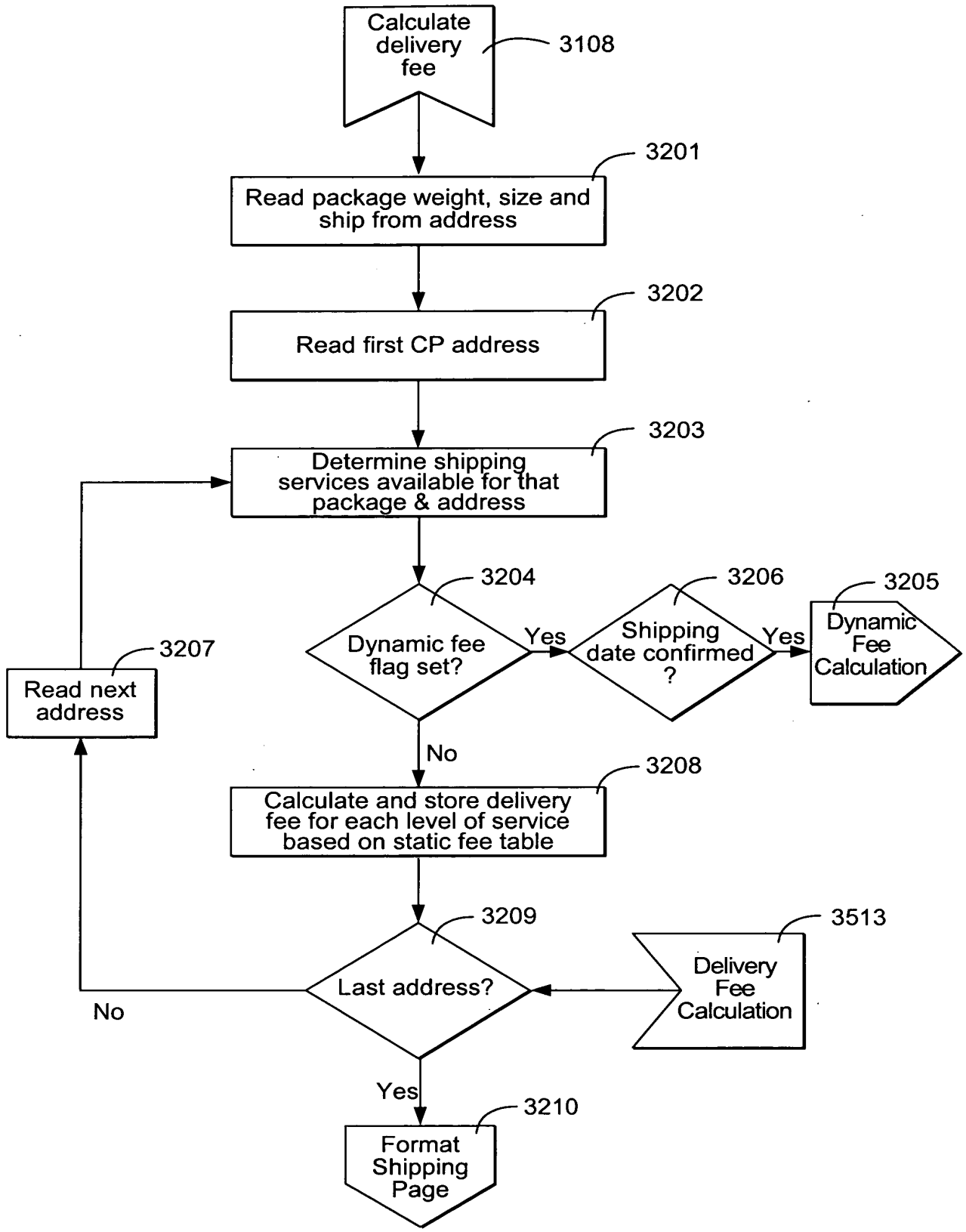

Calculate delivery fee
3108
3201
Read package weight, size and ship from address
3202
Read first CP address
3203
Determine shipping services available for that package & address
3204
Dynamic fee flag set?
Yes
3206
Shipping date confirmed ?
Yes
3205
Dynamic Fee Calculation
No
3207
Read next address
3208
Calculate and store delivery fee for each level of service based on static fee table
3209
Last address?
No
3513
Delivery Fee Calculation
Yes
3210
Format Shipping Page

FIG. 32

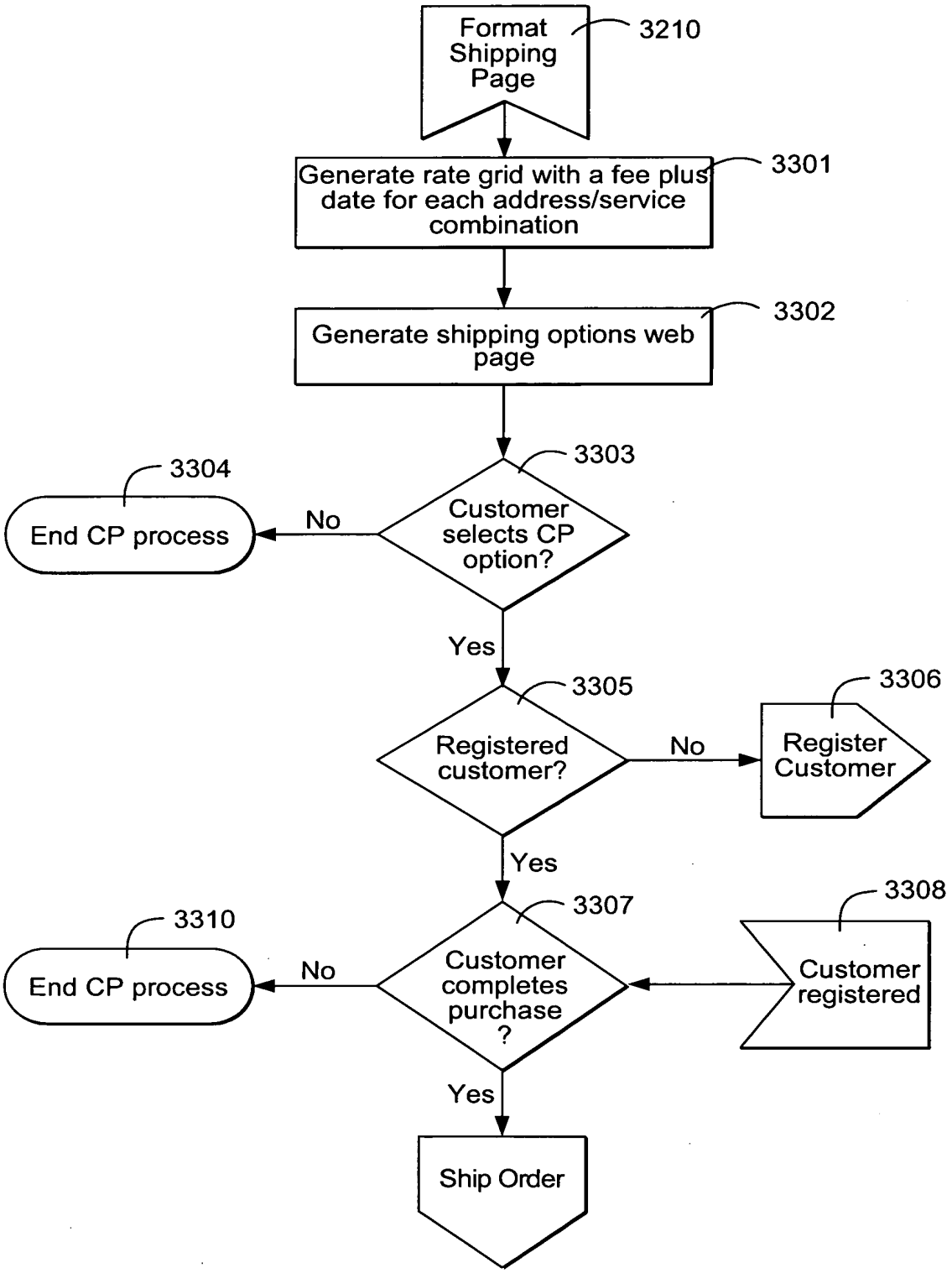

Format Shipping Page
3210
Generate rate grid with a fee plus date for each address/service combination
3301
Generate shipping options web page
3302
Customer selects CP option?
3303
No
End CP process
3304
Yes
Registered customer?
3305
No
Register Customer
3306
Yes
Customer completes purchase ?
3307
No
End CP process
3310
Customer registered
3308
Yes
Ship Order

FIG. 33

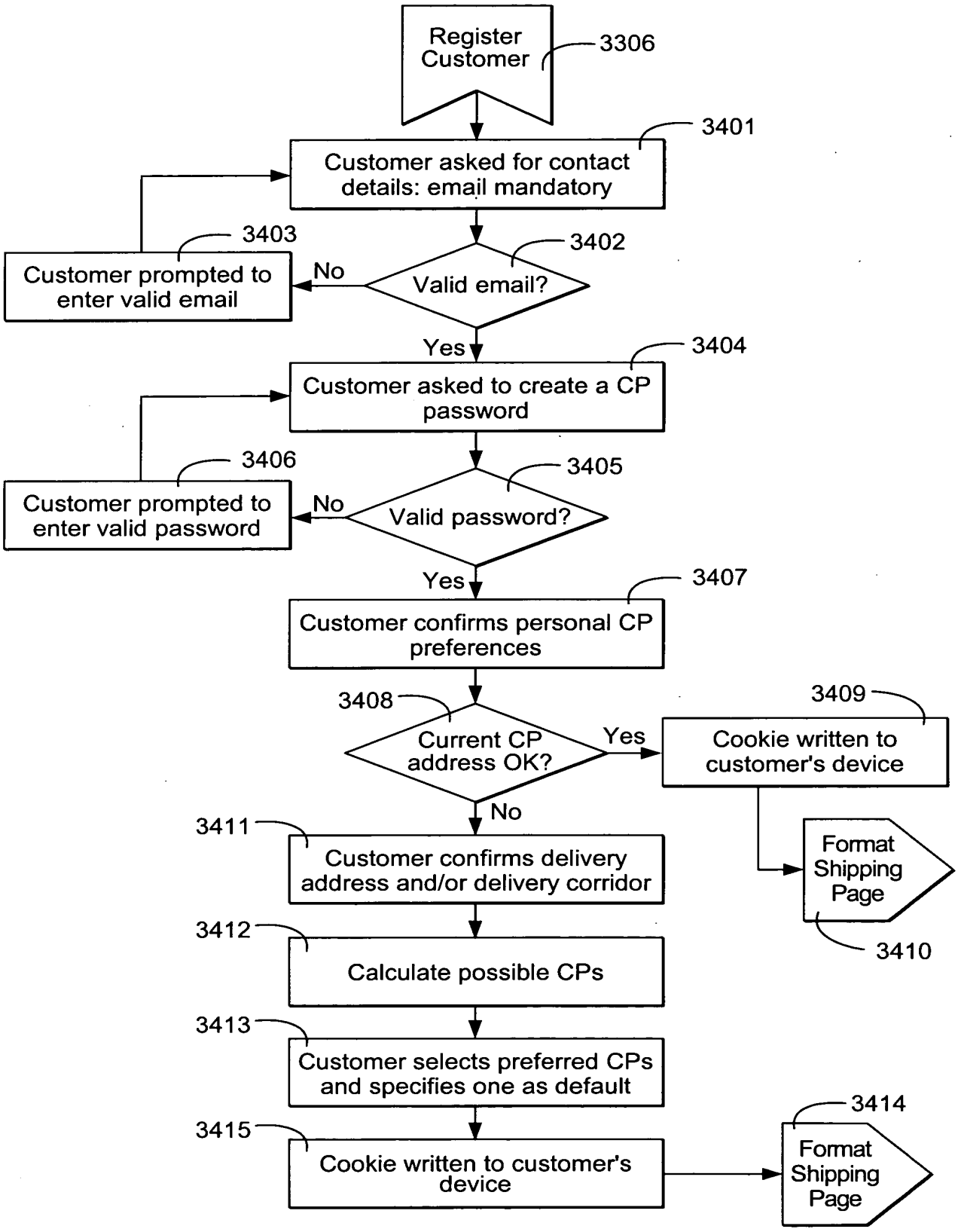

Register Customer
3306
3401
Customer asked for contact details: email mandatory
3403
Customer prompted to enter valid email
No
3402
Valid email?
Yes
3404
Customer asked to create a CP password
3406
Customer prompted to enter valid password
No
3405
Valid password?
Yes
3407
Customer confirms personal CP preferences
3408
Current CP address OK?
Yes
3409
Cookie written to customer's device
Format Shipping Page
3410
No
3411
Customer confirms delivery address and/or delivery corridor
3412
Calculate possible CPs
3413
Customer selects preferred CPs and specifies one as default
3414
3415
Cookie written to customer's device
Format Shipping Page

FIG. 34

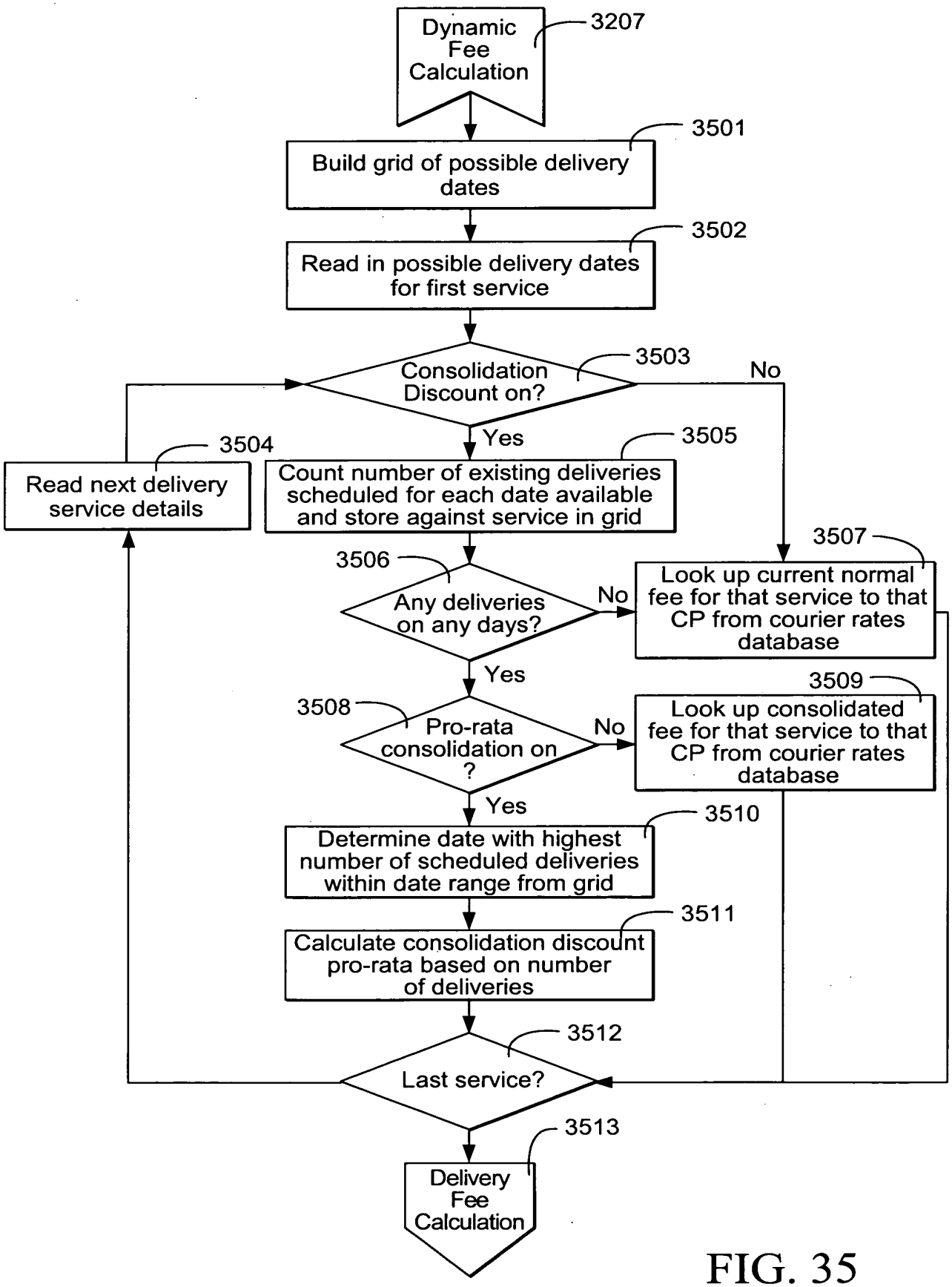

Dynamic Fee Calculation
3207
Build grid of possible delivery dates
3501
Read in possible delivery dates for first service
3502
Consolidation Discount on?
3503
No
Yes
Read next delivery service details
3504
Count number of existing deliveries scheduled for each date available and store against service in grid
3505
3506
Any deliveries on any days?
No
Look up current normal fee for that service to that CP from courier rates database
3507
Yes
3508
Pro-rata consolidation on ?
No
Look up consolidated fee for that service to that CP from courier rates database
3509
Yes
Determine date with highest number of scheduled deliveries within date range from grid
3510
Calculate consolidation discount pro-rata based on number of deliveries
3511
Last service?
3512
Delivery Fee Calculation
3513

FIG. 35

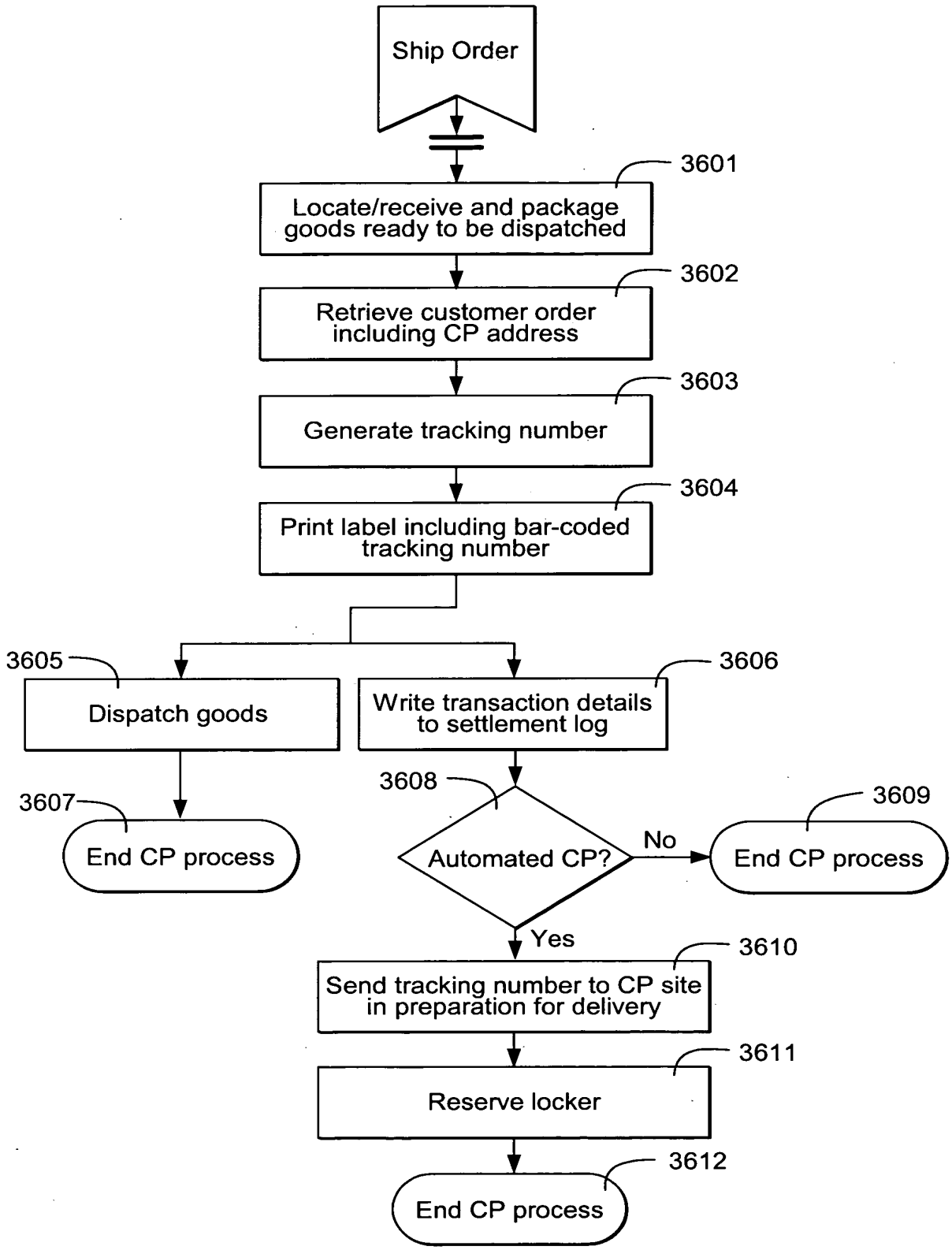

Ship Order
3601
Locate/receive and package goods ready to be dispatched
3602
Retrieve customer order including CP address
3603
Generate tracking number
3604
Print label including bar-coded tracking number
3605
Dispatch goods
3606
Write transaction details to settlement log
3607
End CP process
3608
Automated CP?
No
3609
End CP process
Yes
3610
Send tracking number to CP site in preparation for delivery
3611
Reserve locker
3612
End CP process

FIG. 36

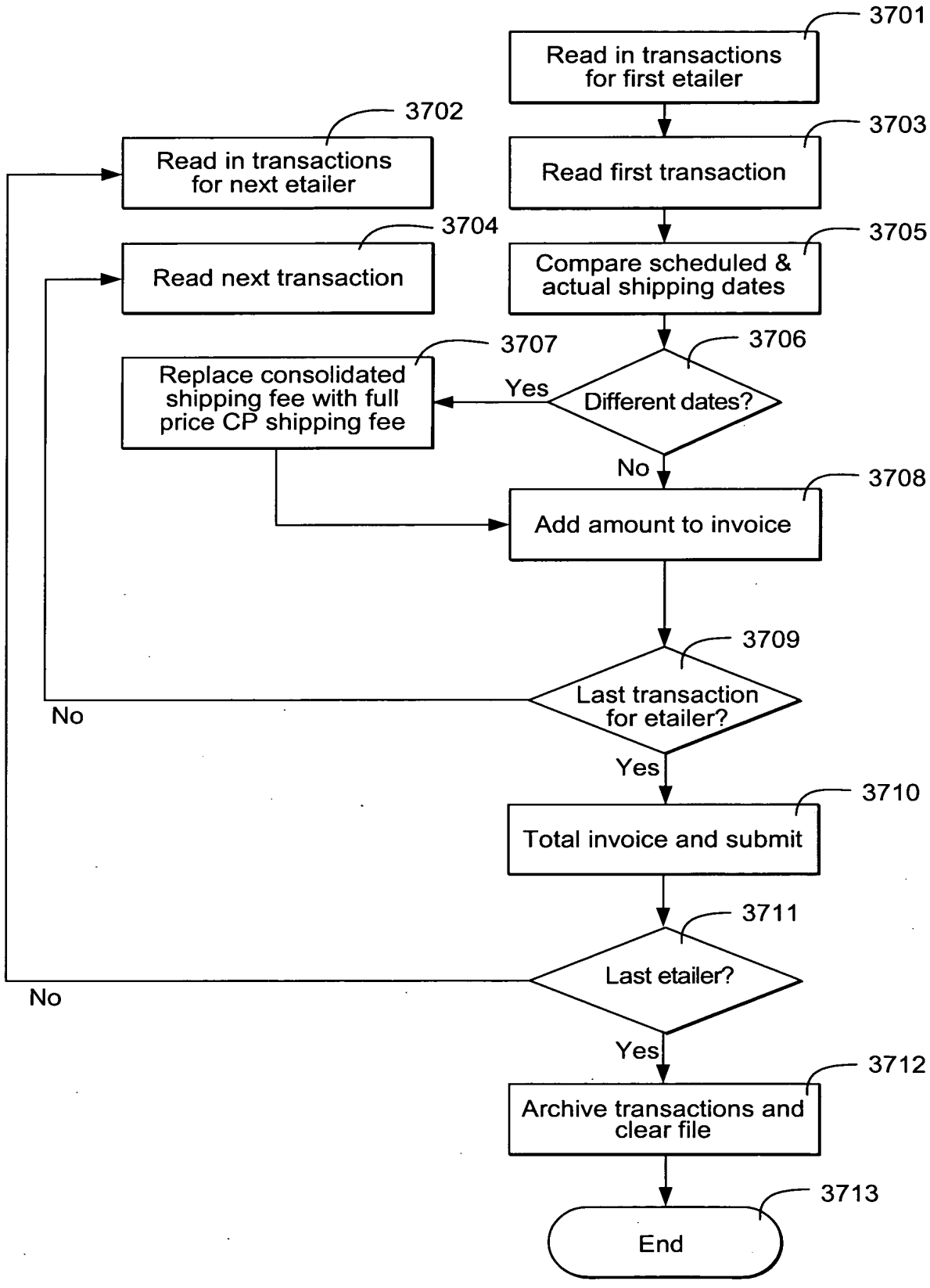

3701
Read in transactions for first etailer
3702
Read in transactions for next etailer
3703
Read first transaction
3704
Read next transaction
3705
Compare scheduled & actual shipping dates
3706
Different dates?
Yes
3707
Replace consolidated shipping fee with full price CP shipping fee
No
3708
Add amount to invoice
3709
Last transaction for etailer?
No
Yes
3710
Total invoice and submit
3711
Last etailer?
No
Yes
3712
Archive transactions and clear file
3713
End

FIG. 37

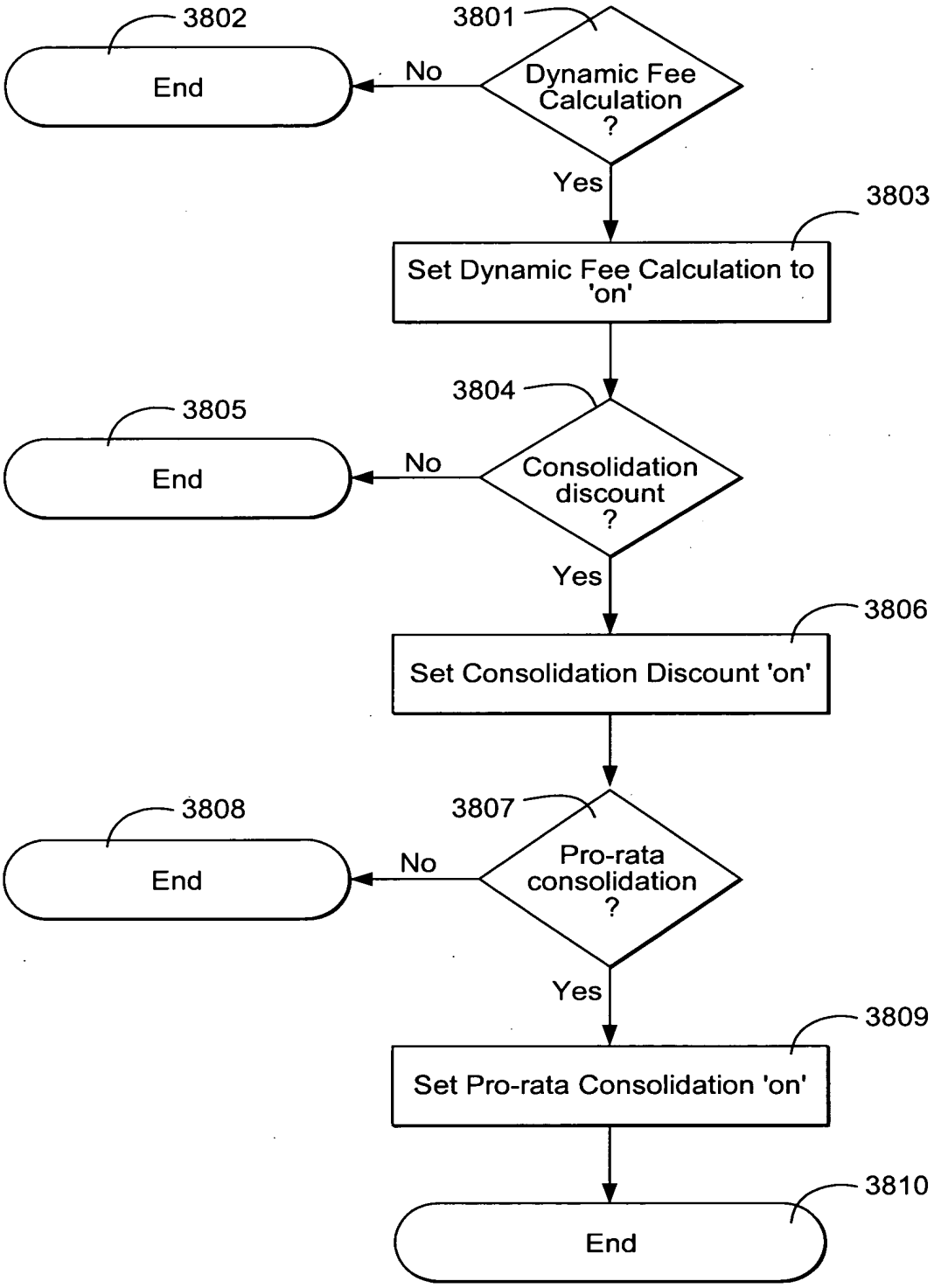

3802
End
3801
No
Dynamic Fee Calculation ?
Yes
3803
Set Dynamic Fee Calculation to 'on'
3804
3805
End
No
Consolidation discount ?
Yes
3806
Set Consolidation Discount 'on'
3807
3808
End
No
Pro-rata consolidation ?
Yes
3809
Set Pro-rata Consolidation 'on'
3810
End

FIG. 38

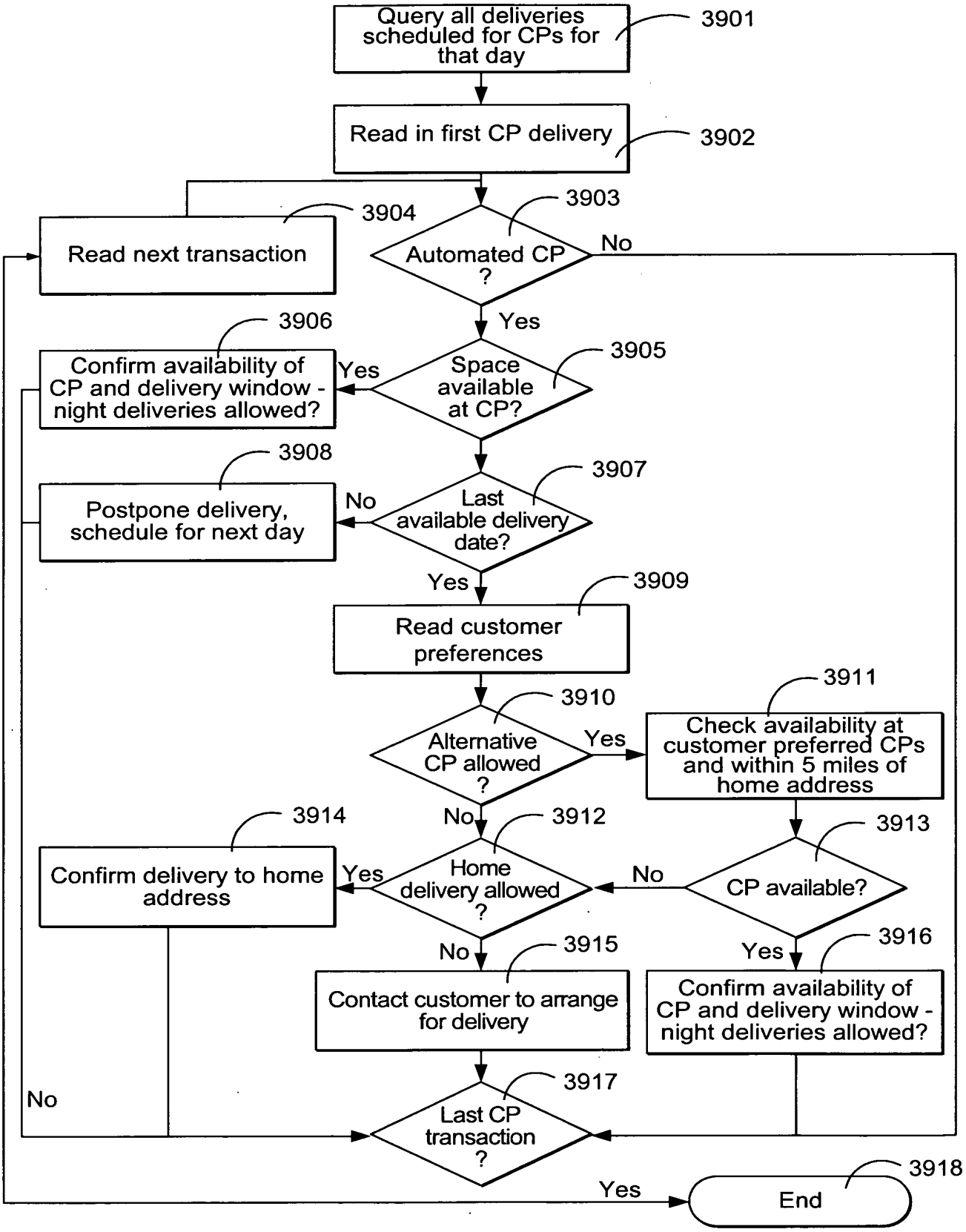

Query all deliveries scheduled for CPs for that day
3901
Read in first CP delivery
3902
3903
Automated CP ?
No
Yes
3904
Read next transaction
3905
Space available at CP?
Yes
3906
Confirm availability of CP and delivery window - night deliveries allowed?
3907
Last available delivery date?
No
3908
Postpone delivery, schedule for next day
Yes
3909
Read customer preferences
3910
Alternative CP allowed ?
Yes
3911
Check availability at customer preferred CPs and within 5 miles of home address
No
3912
Home delivery allowed ?
Yes
3914
Confirm delivery to home address
No
3913
CP available?
No
Yes
3915
Contact customer to arrange for delivery
3916
Confirm availability of CP and delivery window - night deliveries allowed?
3917
Last CP transaction ?
No
Yes
3918
End

FIG. 39

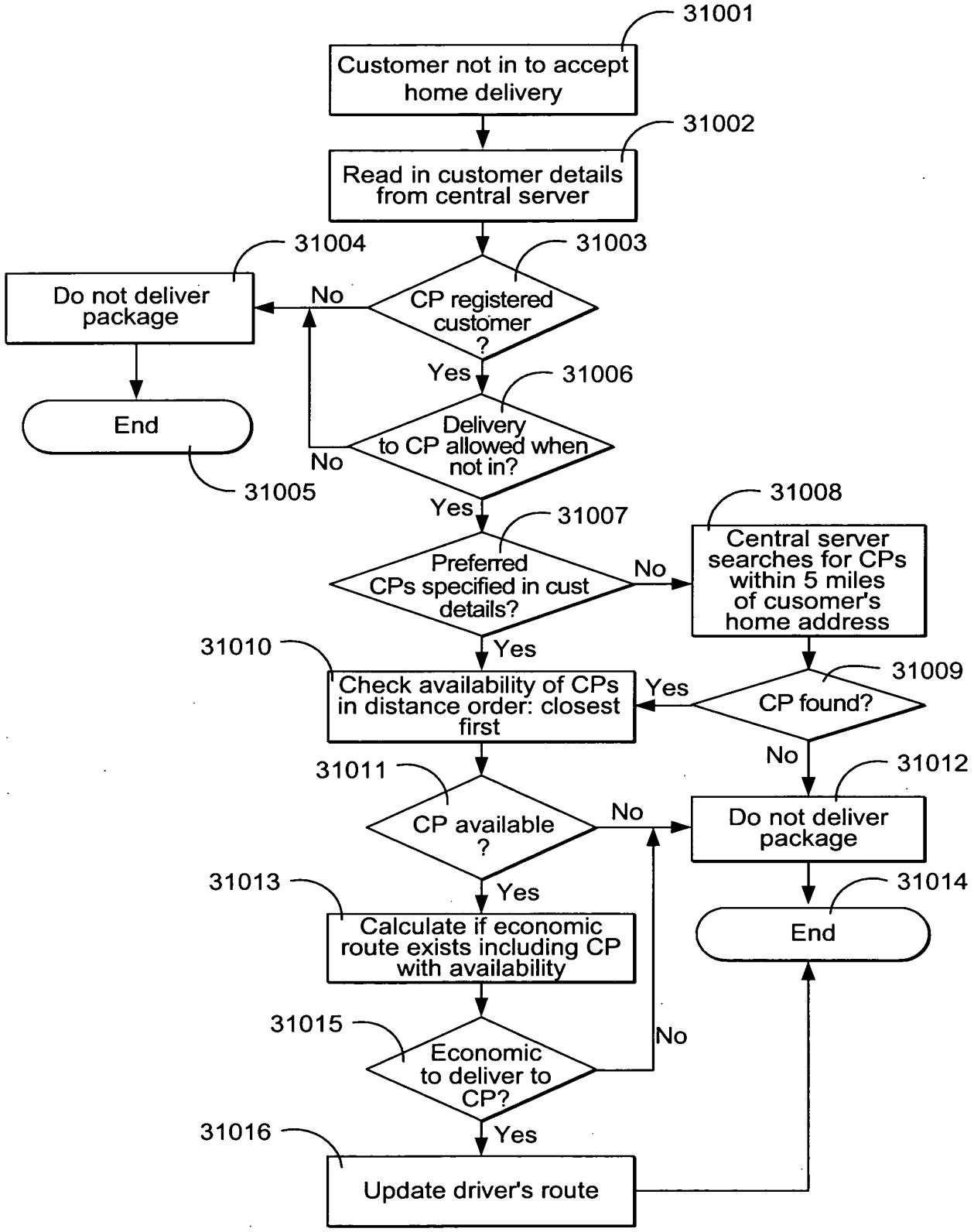

31001
Customer not in to accept home delivery
31002
Read in customer details from central server
31003
CP registered customer ?
No
31004
Do not deliver package
End
31005
Yes
31006
Delivery to CP allowed when not in?
No
Yes
31007
Preferred CPs specified in cust details?
No
31008
Central server searches for CPs within 5 miles of cusomer's home address
Yes
31009
CP found?
Yes
31010
Check availability of CPs in distance order: closest first
No
31012
Do not deliver package
31011
CP available ?
No
Yes
31013
Calculate if economic route exists including CP with availability
31014
End
31015
Economic to deliver to CP?
No
Yes
31016
Update driver's route

FIG. 40